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THE
UNITED STATES
WITH
EXCURSIONS TO MEXICO, CUBA, PORTO RICO, AND ALASKA

HANDBOOK FOR TRAVELLERS

BY

KARL BAEDEKER

WITH 33 MAPS AND 48 PLANS

FOURTH REVISED EDITION

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And specially let this be thy prayere
Unto them all that thee will read or hear,
Where thou art wrong, after their help to call
Thee to correct in any part or all.'

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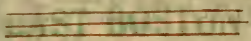

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PREFACE.

The *Handbook to the United States*, undertaken in response to repeated requests from British and American tourists, is intended to help the traveller in planning his tour and disposing of his time to the best advantage and thus to enable him the more thoroughly to enjoy and appreciate the objects of interest he meets with. The writer is *Dr. J. F. Muirhead*, who has had charge of the English editions of Baedeker's Handbooks for quarter of a century, and has personally visited the greater part of the districts described.

The vast extent and rapidly changing conditions of the United States make the production of a satisfactory guidebook a peculiarly difficult task; but for its improvement the Editor confidently and gratefully looks forward to a continuance of those valuable corrections and suggestions with which travellers have long been in the habit of favouring him. In view of the growing favour bestowed on the Handbook by native-born travellers, an attempt has been made to expand those sections which appeal rather to the American than to the foreign tourist, and to lay greater stress upon points interesting from their association with American history or literature.

In the preparation of the Handbook the Editor has received material aid from *Professor Clifford H. Moore* of Harvard (who visited the Yellowstone Park, the Grand Canyon of the Colorado, and California in the interests of the present edition) and from so many other friends in all parts of the United States, as to preclude an enumeration of their names. In particular he wishes to express his obligations to the superior officials of the leading Railway Companies, who have been, almost without exception, uniformly courteous and helpful; to many officials of the Federal and State Governments; to the keepers of the most important libraries, museums, and galleries of art; to the officials of the Appalachian Mountain Club; and to the professors of numerous universities and colleges.

It is hoped that the various monographs of the Introduction, though sometimes going beyond the recognized functions of a guidebook, will be found of material value to the tourist. Each has been written by an undoubted authority on the subject of which it treats; and their general aim is to enable the traveller who studies them to give an intelligent appreciation to the political, social, industrial, and physical aspects of a great country that is much less accurately known by the average European than its importance warrants.

The contents of the Handbook are divided into NINE SECTIONS (Introductory Matter, Approaches; I. The Middle States; II. New England; III. The Middle West; IV. The Far West, California; V. Southern States; VI. Mexico; VII. Cuba, Porto Rico; VIII. Alaska), each of which may be separately removed from the volume by cutting the gauze backing visible on opening the book at the requisite pages. Linen covers for these sections may be obtained through any bookseller.

On the MAPS and PLANS the Editor has bestowed especial care; and it is believed that in this respect the Handbook is more completely equipped than any other publication of the kind relating to the United States. Such merit as they possess is largely due to the kind and efficient coöperation of *Mr. Henry Gannett*, Chief Topographer of the United States Geological Survey. Eight new maps and thirteen new plans have been added to the present edition.

The POPULATIONS are those of the national census of 1900, except in those cases where a State census has been taken at a more recent date.

HOTELS. The Editor has endeavoured to enumerate not only the first-class hotels, but also the more deserving of the cheaper houses. The comfort of an American hotel is, however, much more likely to be in the direct ratio of its charges than is the case in Europe (comp. p. xxii). Although changes frequently take place, and prices generally have an upward tendency, the average charges stated in the Handbook will enable the traveller to form a fair estimate of his expenditure. The value of the asterisks, which are used as marks of commendation, is relative only, signifying that the houses are good of their kind.

To hotel-proprietors, tradesmen, and others the Editor begs to intimate that a character for fair dealing and courtesy towards travellers is the sole passport to his commendation, and that advertisements of every kind are strictly excluded from his Handbooks. Hotel-keepers are also warned against persons representing themselves as agents for Baedeker's Handbooks.

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Abbreviations.

R. = Room; B. = Breakfast; D. = Dinner; L. = Luncheon; Rfmts. = Refreshments. — N. = North, Northern, etc.; S. = South, etc.; E. = East, etc.; W. = West, etc. — M. = English (or American) Mile; ft. = Engl. foot; yd. = yard; min. = minute; hr. = hour. — ca. = circa, about; comp. = compare. — Ho. = House; Hot. = Hotel; Ave. = Avenue; St. = Street; R.R. = railroad; Ry. = Railway; Mt. = Mountain. — U.S. = United States. — Pl. = plan.

The letter *d* with a date, after the name of a person, indicates the year of his death. — The number of feet given after the name of a place shows its height above the sea-level. — The number of miles placed before the principal places on railway-routes indicates their distance from the starting-point of the route.

Asterisks are used as marks of commendation.

INTRODUCTION.

I. Money. Expenses. Passports. Custom House. Time.

Money. The currency of the United States is arranged on a decimal system, of which the dollar ($), divided into 100 cents (c.), is the unit. The *Gold* coins are the pieces of $1 (no longer minted), $2½, $5, $10, and $20. The *Silver* coins are the dollar, half-dollar, quarter dollar (= 1 *s.*), and 'dime' (10 c.). The 5 c. piece or 'nickel' is made of *Nickel* (silver 5 c. pieces still occasionally seen), and there are *Bronze* pieces of 1 c. (½ *d.*) and 2 c. (1 *d.*). The 3 c. piece (nickel) is no longer coined. The U. S. *Paper Currency* consists of Gold Notes (of the denomination of $10, $20, $50, $100, $500, $1000, $5000, and $10,000), United States Notes ('greenbacks'), U. S. Treasury Notes, and Silver Certificates. The last three are issued for $1, $2, $5, $10, $20, $50, $100, $500, and $1000. All are redeemable at par. The *National Bank Bills* (from $5 to $1000) are also universally current. Throughout nearly the whole of the country notes are much more common than coins for all sums of $1 and upwards; but on the Pacific Slope gold and silver are in almost exclusive use. For practical purposes the dollar may be reckoned as 4 *s.* and $5 as 1 *l.*; but the actual rate of exchange for 1 *l.* is generally between $4.80 and $4.90 (or $1 = about 4 *s.* 2 *d.*).

The European visitor to the United States will find it convenient to carry his money in the form of letters of credit, or circular notes, which are readily procurable at the principal banks. Foreign money does not circulate in the United States, even the Canadian coins of exactly the same form and value as American coins being generally refused; but Bank of England notes are usually taken at their full value at the hotels of all the larger cities. — Post Office Orders (see p. xxv) are not convenient for strangers, as evidence of identity is generally required before payment, though this may be waived by the remitter, but the travellers' cheques issued by the American Express Company (see pp. xxv, 20) are cashed at sight in the same way as Post Office Orders in Great Britain and form a very satisfactory mode of paying one's way. The company has offices in London (5 Haymarket), Paris (11 Rue Scribe), Liverpool, Southampton, and other important towns of Europe. Most of the other large Express Companies (pp. xxv, 20) also issue Money Orders payable at sight (fee about one-half of one per cent, with a minimum of 50 c.).

Expenses. The expenses of a visit to the United States depend, of course, on the habits and tastes of the traveller, but are almost inevitably from one-fourth to one-third higher than those of European travel. The distances to be traversed are so great that railway-fares are sure to be absolutely, even when not relatively,

higher (comp. p. xvii); and comfortable hotels of the second or third class are comparatively rare. Persons of moderate requirements, however, by frequenting boarding-houses instead of hotels and avoiding carriage-hire as much as possible, may travel comfortably (exclusive of long continuous journeys) for \$5-7½ (20-30*s.*) a day; but it would be safer to reckon on a daily expenditure of at least \$10 (2*l.*). An entire day (24 hrs.) spent on the train (*i.e.* a journey of 500-800 M.) costs, with Pullman car accommodation and meals, about \$20-25 (4-5*l.*). The cost of living varies considerably in different parts of the country; and New York, where most visitors land, is one of the most expensive cities in America. Comp. pp. xxii, 13.

Passports, though not necessary in the United States, may be useful in procuring delivery of registered and poste restante letters.

Custom House. The custom-house examination of the luggage of travellers entering the United States is generally conducted courteously but often with considerable minuteness. Nothing is admitted free of duty except the personal effects of the traveller, and unusually liberal supplies of unworn clothing are apt to be regarded with considerable suspicion. Residents of the United States may not introduce free clothing or other personal effects purchased abroad of a greater total value than \$100. They may not bring in sealskin garments made abroad at all; and if they take such garments with them to other countries, they should 'register' them before starting with the U.S. Customs Collector at the port of departure. The traveller should be careful to 'declare' everything he has of a dutiable nature, as otherwise it is liable to summary confiscation (comp. p. xv). Not more than 50 cigars or 300 cigarettes may be passed free.

In accordance with an Act of 1903 a head-tax of \$2 may be levied on every foreigner entering the United States, with the exception of citizens of Canada, Newfoundland, Mexico, and Cuba. This tax is generally included in the passage-money paid by travellers reaching the United States by sea, but Europeans may have to pay it each time they cross the frontier from Canada.

Time. For the convenience of railways and others a *Standard of Time* for the United States was agreed upon in 1883, and a system adopted by which the country was divided into four sections, each of 15° of longitude (1 hr.). *Eastern Time*, or that of the 75th Meridian, prevails from the Atlantic Coast to a line running through Detroit, Buffalo, Pittsburg, and Charleston. *Central Time* (of Meridian 90), 1 hr. slower, extends thence to a line running from Bismarck (N.D.) to the mouth of the Rio Grande. *Mountain Time* (105° long.) extends to the W. borders of Idaho, Utah, and Arizona. *Pacific Time* (120°) covers the rest of the country. Thus noon at New York is 11 a.m. at Chicago, 10 a.m. at Denver, and 9 a.m. at San Francisco. True local or mean solar time may be anywhere from 1 min. to 30 min. ahead or behind the standard time.

II. Voyage from Europe to the United States.

The chief routes from Europe to the United States are indicated in R. 1 (comp. also p. 11); and the steamers of any of the companies there mentioned afford comfortable accommodation and speedy transit. The fares vary considerably according to season and the character of the vessel; but the extremes for a saloon-passage may be placed at $50 (10*l.*) and $500 (100*l.*), the latter sum securing a suite of deck-rooms on the largest, finest, and quickest boats in the service. The average rate for a good stateroom in a good steamer may be reckoned at $75-125 (15-25*l.*). The intermediate or second cabin costs $30-65 (6-13*l.*), the steerage $15-20 (3-4*l.*). The slowest steamers, as a general rule, have the lowest fares; and for those who do not object to a prolongation of the voyage they often offer as much comfort as the 'ocean greyhounds.'

The average duration of the passage across the Atlantic is 6-9 days. Passengers should pack clothing and other necessaries for the voyage in small flat boxes (*not* portmanteaus), such as can lie easily in the cabin, as all bulky luggage is stowed away in the hold. Stateroom trunks should not exceed 3 ft. in length, 1½-2 ft. in breadth, and 13 inches in height. Trunks not wanted on board should be marked 'Hold' or 'Not Wanted', the others 'Cabin' or 'Wanted'. The steamship companies generally provide labels for this purpose. Dress for the voyage should be of a plain and serviceable description, and it is advisable, even in midsummer, to be provided with warm clothing. A deck-chair, which is a luxury that may almost be called a necessary, may be purchased before starting (from 6*s.* or 7*s.* upwards) but is now more often hired from the deck-steward (2-4*s.*). If bought, it should be distinctly marked with the owner's name or initials, and may be left in charge of the Steamship Co.'s agents until the return-journey. Seats at table, retained throughout the voyage, are usually assigned by the Saloon Steward immediately after starting; and those who wish seats at a particular table or beside a particular person should apply to him. The passenger should also interview the bath-steward to fix an hour for his morning-tub. It is usual to give a fee of 10*s.* (2½ dollars) to the table-steward and to the stateroom-steward, and small gratuities are also expected by the boot-cleaner, the bath-steward, etc. The customary fees are, of course, much lower in the second cabin. — Landing at New York, see pp. 2, 10.

During the voyage one of the ship's officers distributes blank forms, on which the passengers 'declare' any dutiable articles they may have in their trunks. These are returned to the ship's officer, but the passengers retain the detachable coupon at the bottom of the form to present to the chief customs officer on the dock. The luggage is examined in the covered hall adjoining the wharf, where it is arranged as far as possible in alphabetical order by the initials of the owners' names (comp. p. 10). After the examination the traveller may hire a carriage to take himself and his baggage to his destination, or he may send his trunks by a transfer-agent or express man (see p. xviii) and go himself on foot or by tramway. Telegraph messengers and representatives of hotels also meet the steamers.

III. Railways. Steamers. Coaches. Tramways.

Railways. The United States now contain about 286,000 M. of railway, or more than one-half of the total mileage of the world. The lines are all in private hands, and the capital invested in them amounts to about $15,000,000,000 (3,000,000,000 *l.*). Nearly

50 corporations report over 1000 M. of track each, while the Pennsylvania Railroad System alone works fully 11,000 M. The total number of employees is about 1,200,000. The railway mileage per 1 sq. M. of surface varies greatly in the different states. Illinois has about 12,000 M. of railway, Rhode Island about 210 M. In 1907 the number of passengers carried was 815,774,188, and the average distance travelled by each was about 32 M.

The equipments of American railways are, as is well known, very different from those of European railways, though the standard gauge (4 ft. 8½ in.) is the same. Instead of comparatively small coaches, divided into compartments holding 6-8 people each, the American railways have long cars (like an enlarged tramway-car), holding 60-70 pers., entered by doors at each end, and having a longitudinal passage down the middle, with the seats on each side of it. Each seat has room for two passengers. Local and short-distance trains, especially in the East, generally have one class of carriage only, but all long-distance trains are also furnished with drawing-room (parlor) cars by day and sleeping-cars at night, which accommodate about 24-32 people in the same space as the ordinary cars and are in every way much more comfortable. Second-class and emigrant carriages are also found on some long-distance trains and in parts of the South and West, but scarcely concern the tourist. Smoking is not permitted except in the cars ('Smokers' specially provided for the purpose and generally found at the forward end of the train. Smoking compartments are also usually found in the parlor-cars. The parlor and sleeping cars are generally the property of special corporations, of which the Pullman Company is the chief; but on a few railways they belong to the railway-company itself. The vexed question of whether the American or the European railway-carriage is the more comfortable is hard to decide. It may be said generally, however, that the small compartment system would never have done for the long journeys of America, while the parlor-cars certainly offer greater comfort in proportion to their expense than the European first-class carriages do. A *Limited Vestibuled Train*, such as that described at p. 229, comes measurably near the ideal of comfortable railway travelling, and reduces to a minimum the bodily discomfort and tedium of long railway-journeys. In comparing the ordinary American car with the second-class or the best third-class carriages of Europe, some travellers may be inclined to give the preference for short journeys to the latter. The seats in the American cars offer very limited room for two persons, and their backs are often too low to afford any support to the head; a single crying infant or spoiled child annoys 60-70 persons instead of the few in one compartment; the passenger has little control over his window, as someone in the car is sure to object if he opens it; the window opens upward instead of downward; the continual opening and shutting of the doors, with the consequent draughts, are annoying; the incessant visitation of the train-boy, with his books, candy, and other articles for sale, renders a quiet nap almost impossible; while, in the event of an accident, there are only two exits for 60 people instead of six or eight. On the other hand the liberty of moving about the car, or, in fact, from end to end of the train, the toilette accommodation, and the amusement of watching one's fellow-passengers greatly mitigate the tedium of a long journey; while the publicity prevents any risk of the railway crimes sometimes perpetrated in the separate compartments of the European system. Rugs, as a rule, are not necessary, as the cars are apt to be over, rather than under, heated. Comparatively little accommodation is provided in the way of luggage-racks, so that travellers should reduce their hand-baggage to the smallest possible dimensions. — In the sleeping-car the passenger engages a *Half-Section*, consisting of a so-called 'double berth', which, however, is rarely used by more than one person. If desirous of more air and space, he may engage a whole *Section* (at double the rate of a half-section), but in many cases a passenger is not allowed to monopolize a whole section to the exclusion of those not otherwise able to find

accommodation. Parties of 2-4 may secure *Drawing Rooms*, or private compartments. A lower berth is generally considered preferable to an upper berth, as it is easier to get into and commands the window; but, by what seems a somewhat illiberal regulation of the sleeping-car companies, the upper berth is always let down, whether occupied or not, unless the whole section is paid for. So far nothing has been done towards reserving a special part of the car for ladies, except in the shape of a small toilette and dressing room. The Pullman agent at a terminal station may sometimes be unable to supply a lower berth, but the traveller may find it possible to exchange an upper for a lower berth at one of the larger stations *en route*. — The so-called *Tourist Cars*, now found on all the main transcontinental lines, may be described as second-class Pullman Cars (see p. xvi), at about half the Pullman rates, and may be recommended to those who wish to economize. They are, however, apt to contain too many noisy children; and the facilities afforded for light cooking are not appreciated by those who do not make use of them. Passengers by these cars may take their meals in the dining-cars (see below). — *Dining Cars* are often attached to long-distance trains, and the meals and service upon them are generally better than those of the railway-restaurants. The prices (usually *à la carte*) are comparatively high; and this is also true of refreshments furnished from the buffets of sleeping or parlor cars. It should be noticed that no alcoholic drinks are served while the train is passing through 'Prohibition' states (now somewhat numerous). — Tickets are collected on the train by the *Conductor* (guard), who sometimes gives counter-checks in exchange for them. Separate tickets are issued for the seats in parlor-cars and the berths in sleeping-cars; and such cars generally have special conductors. Fees are rarely given except to the coloured *Porters* of the parlor-cars, who brush the traveller's clothes and (on overnight journeys) boots and expect about 25 c. a day. In America the traveller is left to rely upon his own common sense still more freely than in England, and no attempt is made to take care of him in the patriarchal fashion of Continental railways. He should, therefore, be careful to see that he is in his proper car, etc. The conductor calls 'all aboard', when the train is about to start, but a warning bell is seldom or never rung. The names of the places passed are often not shown distinctly (sometimes not at all) at the stations, and the brakeman or trainman, whose duty it is to announce each station as the train reaches it, is apt to be entirely unintelligible. A special word of caution may be given as to the frequent necessity for crossing the tracks, as the rails are often flush with the floor of the station and foot-bridges or tunnels are rarely provided. Each locomotive carries a large bell, which is tolled as it approaches stations or level ('grade') crossings. — With the exception of the main line trains in the Eastern States (some of which rank among the fastest in the world), the speed of American trains is generally lower than that of English trains; and over a large portion of the South and West it does not exceed 25-30 M. per hour even for through-trains. It should be remembered that on Sunday railway service is often very poor, especially as regards connections.

Fares vary so much in different parts of the country, that it is difficult to state an average. Perhaps 3 c. (1½ *d.*) per mile will be found nearly correct on the whole, though in many cases the rate is lower, especially for season, 'commutation' (good for so many trips), or mileage tickets, while in the South and West 3 c. is sometimes exceeded. The general tendency is towards a final adjustment on a 2 c. basis. The extra rate for the palace-cars (½-1 c. per mile) is low as compared with the difference between the first and third class fares in England, and the extra comfort afforded is very great. Return-tickets ('excursion' or 'round trip' tickets) are often issued at considerable reductions (comp. also p. xxii). The 1000 M. Tickets, from which the conductor collects coupons representing the number of miles travelled, is a convenient arrangement. A distinction is frequently made between 'Limited' and 'Unlimited' tickets, the former and cheaper admitting of continuous passage only, without 'stopovers'; and the latter being available until used and admitting of 'stopovers' at any place on the route. Tickets may sometimes be obtained at lower than

the regulation rates at the offices of the so-called 'Scalpers', found in all large towns; but the stranger should hardly attempt to deal with them unless aided by a friendly expert. In some states their business is illegal. Railway-fares change more frequently in the United States than in Europe, so that the continued accuracy of those given throughout the Handbook cannot be guaranteed. — At the larger railway-stations the place of the first, second, and third class waiting-rooms of Europe is taken by a *Ladies' Room*, to which men are also generally admitted if not smoking, and a *Men's Room*, in which smoking is usually permitted.

Among the American *Railway Terms* with which the traveller should be familiar (in addition to those already incidentally mentioned) are the following. *Railroad* is generally used instead of railway (the latter term being more often applied to street-railways, *i.e.* tramways), while the word 'Road' alone is often used to mean railroad. The carriages are called *Cars*. The *Conductor* is aided by *Trainmen* or *Brakemen*, whose duties include attention to the heating and lighting of the cars. A slow train is called an *Accommodation*, *Local*, or *Way Train*. The *Ticket Office* is never called booking-office. *Coupon Tickets* are tickets for long journeys, usually over the lines of different corporations, consisting of two or more detachable coupons for the intermediate stages. Luggage is *Baggage*, and is expedited through the *Baggage Master* (see below). *Depot* is very commonly used instead of station, and in many places the latter word, when used alone, means police-station. A season-ticket holder is known as a *Commuter*. Other terms in common use are: *turn-out* = siding; *bumper* = buffer; *box-car* = closed goods car; *freight-train* = goods train; *caboose* = guard's van (of goods train); *cars* = train; *to pull out* = to start; *way station* = small, wayside station; *cow-catcher* = fender in front of engine; *switch* = shunt; *switches* = points.

The railway-system of the United States is so vast that it is impracticable to produce such complete *Railway Guides* as those of European countries. The fullest is *The Official Guide of the Railways and Steam Navigation Lines in the United States, Porto Rico, Canada, Mexico, and Cuba*, a bulky volume of 1200-1300 pp., published monthly at New York ($1). The *Traveller's Railway Guide, Eastern Section*, and *Western Section*, issued monthly at New York and Chicago (each 25 c.), are pocket-editions of the Official Guide. Local collections of time-tables are everywhere procurable, and those of each railway-company may be obtained gratis at the ticket-offices and in hotels. All the more important railway-companies publish a mass of 'folders' and descriptive pamphlets, which are distributed gratis and give a great deal of information about the country traversed. These are often very skilfully prepared and well illustrated.

Luggage. Each passenger on an American railway is generally entitled to 150 lbs. of luggage ('baggage') free. The so-called *Check System* makes the management of luggage very simple. On arrival at the station the traveller shows his railway-ticket and hands over his impedimenta to the *Baggage Master*, who fastens a small numbered tag, made of brass or cardboard, to each article and gives the passenger brass or cardboard 'checks' with corresponding numbers. The railway-company then becomes responsible for the luggage and holds it until reclaimed at the passenger's destination by the presentation of the duplicate check. As the train approaches the larger cities, a *Transfer Agent* usually walks through the cars, undertaking the delivery of luggage and giving receipts in exchange for the checks. The charge for this is usually at least 25 c. per package, and it is thus more economical (though a composition may sometimes be effected for a number of articles) to have one large trunk instead of two or three smaller ones. The hotel-porters who meet the train will also take the traveller's checks and see that his baggage is delivered at the hotel. In starting, the trunks may be sent to the railway-station in the same way, either through a transfer agent or the hotel-porter, who give a 'claim-check', to be exchanged at the station. If the traveller already has his railway-ticket they may often be checked through from the house or hotel to his destination, even though that be at the other side of the continent, 3000 M. away. Baggage, unaccompanied by its owner, may be sent to

any part of the country by the *Express Companies* (comp. p. 20), which charge in proportion to weight and distance. The drawbacks to the transfer system are that the baggage must usually be ready to be called for before the traveller himself requires to start, and that sometimes (especially in New York) a little delay may take place in its delivery; but this may, of course, be avoided by the more expensive plan of using a carriage between the house and railway-station.

Steamers. Some of the American steamers, such as the Fall River and Hudson boats (pp. 81, 246), offer comforts and luxuries such as are scarcely known in Europe, and their fares are usually moderate. Where the fare does not include a separate stateroom, the traveller by night will find the extra expenditure for one ($ 1-2) more than compensated. Meals are sometimes included in the fare and are sometimes served either *à la carte* or at a fixed price. Throughout the Handbook the traveller will find indicated the routes on which he may advantageously prefer the steamer to the railway.

Coaches, usually called *Stages*, and in some country-places *Barges*, have now been replaced by railways throughout nearly the whole of the United States, but in places like the Yosemite (p. 540), the Yellowstone (p. 447), etc., the traveller is still dependent on this mode of conveyance. The roads are generally so bad, that the delights of coaching as known in England are for the most part conspicuously absent. The speed seldom exceeds 6 M. an hour and is sometimes less than this. The fares are relatively high.

Carriages. Carriage-hire is very high in the United States in spite of the fact that neither the price of horses nor their keep is higher than in England. Fares vary so much that it is impossible to give any general approximation, but they are rarely less than twice as high as in Europe. When the traveller drives himself in a 'buggy' or other small carriage, the rates are relatively much lower.

Electric Tramways. The enormous increase in the number of *Electric Tramways*, *Light Railways*, or '*Trolley Lines*' has been one of the most striking features of the transportation system of the United States in the past few years. There are now about 40,000 M. of electric track and 90,000 cars, employing 240,000 men and carrying 9,000,000,000 passengers yearly.

Not only do nearly all the cities of the United States possess excellent systems of electric tramways, which enable the tourist to visit the points of interest, urban and suburban, at a minimum expenditure of time and money; but the network of lines extends all over the country, often offering a journey of 100 M. or more at a very moderate cost. It is *(e.g.)* practicable to go from Maine to New York (420 M.) in a successive series of such tramways, while the distance between New York or Boston and Chicago (ca. 1000 M.) may be traversed with breaks of only a few miles. This way of travelling offers many advantages to the tourist who wishes to become as intimately acquainted as possible with the country he traverses. Some of these trolley-lines attain a maximum speed of 40-50 M. per hour.

IV. Plan of Tour.

The plan of tour must depend entirely on the traveller's taste and the time he has at his disposal. It is manifestly impossible to

cover more than a limited section of so vast a territory in an ordinary travelling season; but the enormous distances are practically much dominished by the comfortable arrangements for travelling at night (cimp. p. xvi). Among the grandest natural features of the country are Niagara Falls (R. 14), the Yellowstone Park (R. 72), the Yosemite Valley (R. 86), Alaska (R. 120), and the Grand Canyon of the Colorado (p. 481). Along with these may be mentioned the canyons, mountains, and fantastic rocks of Colorado (RR. 75, 77), the grand isolated snow-covered volcanic cones of the Pacific coast (pp. 446, 469, 505, etc.), the Mammoth Cave of Kentucky (p. 584), the Cavern of Luray (p. 597), the Natural Bridge of Virginia (p. 598), and the Shoshone Falls (p. 467). Among the most easily accessible regions of fine scenery are the Adirondacks (R. 8), the White Mts. (R. 43), the Catskills (R. 7), Mt. Desert (R. 37), the Hudson (R. 4), and the Delaware Water Gap (p. 140). Visitors to the S., besides the climate and vegetation, will find much to repay them, especially in such quaint old cities as New Orleans (R. 109). California (RR. 79-87) abounds in objects of interest and beauty. The trip into Mexico (RR. 111-115) is well worth the making, and may be extended (viâ Vera Cruz) to Cuba (RR. 116-118) and Porto Rico (R. 119). Travellers who make the trip to the Pacific Coast and back will do well so to plan their journey as to include the wonderful scenery of the Denver & Rio Grande Railroad (R. 77), as well as a trip into the Yellowstone Park, while the W. part of the Canadian Pacific Railway, between Vancouver and Banff (about 600 M.; see *Baedeker's Canada*), offers the grandest railway scenery in North America. Most of the larger cities have their own special points of interest, and a visit to the national capital (p. 211) should by all means be made.

Where the territory included is so vast and the possible combinations of tours so endless, it may seem almost useless to attempt to draw up any specimen tours. The following, however, though not intrinsically better than hundreds of others, may serve to give the traveller some idea of the distances to be traversed and of the average expenses of locomotion. It is, perhaps, needless to say that the traveller will enjoy himself better if he content himself with a less rapid rate of progress than that here indicated. A daily outlay of $10-12 will probably cover all the regular travelling expenses, on the under-noted tours; and this rate may be much diminished by longer halts.

a. A Week from New York.
(Railway Expenses about $40.)

	Days
New York to *Albany* by steamer (R. 4a)	1
Albany to *Buffalo* and *Niagara Falls* (RR. 12, 14)	1½
Niagara Falls to *Toronto* (see *Baedeker's Canada*)	½
Toronto to *Montreal* by Lake Ontario and the St. Lawrence (R. 15)	1½
Montreal to *Boston* (RR. 42, 31)	2
Boston to *New York* (R. 30)	½
	7

Visits to the *Catskills* (R. 7), *Adirondacks* (R. 8), and *White Mts.* (R. 43) may easily be combined with the above tour. Or we may go from Montreal to *Quebec* (see *Baedeker's Canada;* ½ day) and thence to *Portland* (RR. 41, 35) or to Boston direct (R. 42).

b. A Week from New York.

(With use of night-trains; fares about $ 50.)

	Days
New York by Fall River or Metropolitan Line to *Boston* (RR. 30, 31)	1
From Boston by night-train (13½ hrs.) to Buffalo (RR. 30, 12)	½
Buffalo and *Niagara Falls* (RR. 12, 14)	½
From Buffalo by night-train (13 hrs.) to Chicago (R. 50)	½
Chicago (R. 51)	½
Chicago to *Washington* and at Washington (RR. 29g, 28)	3
Washington to *Philadelphia* and at Philadelphia (RR. 27, 25, 17)	⅞
Philadelphia to *New York* (R. 16) by evening train	⅛
	7

c. A Fortnight from New York.

(Railway Fares about $ 60.)

New York to *Niagara Falls* as at p. xx (RR. 4, 12, 14)	2½
Niagara Falls to *Chicago* (R. 50)	1
Chicago (R. 51)	3
Chicago to *Washington* and at Washington (RR. 49, 28)	4
Washington to *Baltimore* (RR. 27, 26)	1
Baltimore to *Philadelphia* (R. 25)	½
Philadelphia, and back to *New York* (RR. 17, 16)	2
	14

d. Three Weeks from New York.

(Railway Fares about $ 120.)

New York to *Chicago* as above (RR. 4, 12, 14, 50)	6½
Chicago to *St. Louis* (RR. 58, 63)	1½
St. Louis to *New Orleans* (RR. 93, 109)	2
New Orleans to *Jacksonville* (RR. 108, 103)	2
Jacksonville to *St. Augustine* (R. 104)	1
St. Augustine to *Richmond* (RR. 103a, 88)	1½
Richmond to *Washington* (R. 88)	½
Washington, and back to *New York* as above (RR. 28, 27, 26, 25, 17, 16)	5
	20

e. Six Weeks from New York.

(Railway Fares $ 300-350.)

New York to *Chicago* as above (RR. 4, 12, 14, 50)	6½
Chicago to *St. Paul* and *Minneapolis* (RR. 53, 54)	2
St. Paul to *Livingston* (R. 71)	1½
Yellowstone Park (R. 72)	6
Livingston to *Portland* (R. 71, 79)	2
Portland to *San Francisco* (R. 79)	1½
San Francisco, with excursions to *Monterey*, etc. (RR. 80, 81, 82)	5
San Francisco to the *Yosemite* and back (RR. 82, 86)	4
San Francisco to *Salt Lake City* (RR. 73, 77)	3
Salt Lake City to *Denver* viâ the *Marshall Pass*, with excursions from *Colorado Springs* to *Manitou*, etc. (RR. 77, 75)	5½
Denver to *St. Louis* (RR. 63, 63)	2½
St. Louis to *New York* (R. 62)	1½
	41

f. Two Months from New York.

(Railway Fares $ 350-400.)

To *San Francisco* as above (RR. 4, 12, 14, 50, 53, 54, 71, 72, 79, 80, 81)	24½
San Francisco to the *Yosemite* (RR. 82, 86)	3½
Yosemite to *Los Angeles* (*Pasadena*, etc.; RR. 82, 83, 84)	3½
Los Angeles viâ *Barstow* and *Williams* to the *Grand Canyon of the Colorado* (RR. 76, 75b)	3
Williams to *Colorado Springs* (*Manitou*, etc.), with excursion to *Marshall Pass* from *Pueblo* (RR. 75b, 77)	5
Colorado Springs to *Denver* (RR. 77, 75a)	1
Excursions from Denver (R. 75a)	3
Denver to *Kansas City* and *St. Louis* (R. 68)	2½
St. Louis to *Cincinnati* (R. 62d)	1½
Cincinnati to *Washington* (R. 60d)	1
Washington, and thence to *New York* as in Tour b (RR. 28, 27, 26, 25, 17, 16)	6½
	55

The following table of the distances from New York of a few important points, together with the present railway fares and approximate duration of the journey, may not be without interest. The fares are for first-class, 'limited' tickets, but do not include sleeping-car rates.

Boston: 215-230 M.; $ 4.65; 5-6 hrs. — *Chicago:* 912-1043 M.; $ 18-20; 24-36 hrs. — *Cincinnati:* 760 M.; $ 15-17; 22-26 hrs. — *Denver:* 1940-2130 M.; $ 40-43; 2¼-3 days. — *Jacksonville* (Florida): 998-1014 M.; $ 25-26; 25-36 hrs. — *Kansas City:* 1335-1510 M.; $ 26-29; 40-48 hrs. — *Los Angeles:* 3150-3750 M.; $ 76-79; 4½-5½ days. — *Montreal:* 380-450 M.; $ 10.30; 13-15 hrs. — *New Orleans:* 1370 M.; $ 31-33; 40-46 hrs. — *Niagara Falls:* 460 M.; $ 8-9¼; 9-12 hrs. — *Philadelphia:* 90 M.; $ 2¼; 2-2½ hrs. — *Richmond:* 345 M.; $ 9.15; 10½-12 hrs. — *St. Louis:* 1060-1170 M.; $ 21-24; 30-38 hrs. — *St. Paul:* 1330 M.; $ 26-28; 37 hrs. — *Salt Lake City:* 2475-2850 M.; $ 54-57; 3-4 days. — *San Francisco:* distance 3300-3500 M.; fare $ 76-79; time of transit 4½-5½ days. — *Washington:* 228 M.; $ 5.65; 5-6½ hrs.

Excursion Agents. Travellers may sometimes find it advantageous to avail themselves of the facilities for tours in the United States offered by the *Raymond & Whitcomb Co.* (306 Washington St., Boston, and 25 Union Sq., New York) and *Thomas Cook & Son* (245 Broadway, New York). These firms have agencies in all the most frequented resorts throughout the country. The Raymond & Whitcomb Co. arranges for a large series of excursions in special vestibuled trains, under the care of one of its representatives, which relieves the inexperienced traveller of almost all the inconveniences of a journey in a strange land. The arrangements are made so as to afford the widest possible freedom of movement in every way, and the charges are reasonable. For the Raymond trip into Mexico, see p. 640. Among other tourist agents are *Charles H. Gates*, Toledo (706 Madison Ave.), the *American Tourist Association*, Chicago (1418 Marquette Building, Dearborn St.), and *McCann's Tours*, New York (1414 Broadway). — Most of the railway-companies issue tickets for circular tours on favourable conditions, and some of them (such as the Pennsylvania R.R. and the Burlington Route) also arrange personally conducted excursions in special trains.

The **Pedestrian** is unquestionably the most independent of travellers, but, except in a few districts such as the Adirondacks (p. 104) and the White Mts. (p. 320), walking tours are not much in vogue in the United States, where, indeed, the extremes of temperature and the scarcity of well-marked footpaths often offer considerable obstacles. For a short tour a couple of flannel shirts, a pair of worsted stockings, slippers, the articles of the toilet, a light waterproof, and a stout umbrella will generally be found a sufficient equipment. Strong and well-tried boots are essential to comfort. Heavy and complicated knapsacks should be avoided; a light pouch or game-bag is far less irksome, and its position may be shifted at pleasure. A more extensive reserve of clothing should not exceed the limits of a small portmanteau, which may be forwarded from town to town by express.

V. Hotels and Restaurants.

Hotels. The quality of the hotels of the United States (said to be 45,000 in number) varies very greatly in different localities; but it is, perhaps, safe to say that the best American houses will be found fully as comfortable as the first-class hotels of Europe by all who can accommodate themselves to the manners of the country and do not demand everything precisely as they have been used to it at home. The luxury of some of the leading American hotels is, indeed, seldom paralleled in Europe. The charges are little, if at all, higher than those of the best European houses; but the comforts often afforded by the smaller and less pretentious inns of the old country

can seldom be looked for from American houses of the second or third class, and the traveller who wishes to economize will find boarding-houses (see p. xxiv) preferable. When ladies are of the party, it is advisable to frequent the best hotels only. The hotels of the South are often poor and (in proportion to their accommodation) dear; but great improvement has taken place of recent years. Many of the hotels in the West, on the other hand, even in the newest cities, are astonishingly good, and California contains some of the best and cheapest hotels in the United States. The food is generally abundant and of good quality, though the cuisine is unequal (comp. p. xxiv). Beds are almost uniformly excellent. The quality of the service varies. Rooms adjoining the elevator or overlooking streets with tramway-lines should be avoided. It should not be overlooked that many of the largest and best hotels at both summer-resorts and winter-resorts are not open except in the regular season.

A distinction is made between *Hotels on the American Plan*, in which a fixed charge is made per day for board and lodging, and *Hotels on the European Plan*, in which a fixed charge is made for rooms only, while meals are taken *à la carte* either in the hotel or elsewhere. No separate charge is made for service. The European system is becoming more and more common in the larger cities, especially in the East; but the American plan is universal in the smaller towns and country-districts. Many hotels in the large cities offer a choice of systems. The rate of hotels on the American plan varies from about $6 per day in the best houses down to $2 per day or even less in the smaller towns; and $3-4 a day will probably be found about the average rate on an ordinary tour. The charge for a room at a good hotel on the European plan is from $1 upwards. Many of the American hotels vary their rate according to the room, and where two prices are mentioned in the Handbook the traveller should indicate the rate he wishes to pay. Most of the objections to rooms on the upper floor are obviated by the excellent service of 'elevators' (lifts). Very large reductions are made by the week or for two persons occupying the same room; and very much higher prices may be paid for extra accommodation. Throughout the Handbook the insertion of a price after the name of a hotel ($5) means its rate on the American plan; where the hotel is on the European plan (exclusively or alternatively) the price of the room is indicated (R. from $1). The above rates include all the ordinary requirements of hotel-life, and no 'extras' appear in the bill. The custom of giving fees to the servants is by no means so general as in Europe, though it is becoming more and more common. In hotels on the American system the meals are usually served at regular hours (a latitude of about 2 hrs. being allowed for each). The daily charge is considered as made up of four items (room, breakfast, dinner, and supper), and the visitor should see that his bill begins with the first meal he takes. Thus, at a $4 a day house, if the traveller arrives before supper and leaves after breakfast the next day, his bill will be $3; if he arrives after supper and leaves at the same time, $2; and so on. No allowance is made for absence from meals. Dinner is usually served in the middle of the day, except in large cities.

On reaching the hotel, the traveller enters the *Office*, a large and often comfortably fitted-up apartment, used as a general rendezvous and smoking-room, not only by the hotel-guests, but often also by local residents. On one side of it is the desk of the *Hotel Clerk*, who keeps the keys of the bedrooms, supplies unlimited letter-paper gratis, and is supposed to be more or less omniscient on all points on which the traveller is likely to require information. Here the visitor enters his name in the 'register' kept for the purpose, and has his room assigned to him by the clerk, who details a 'bell-boy' to show him the way to his room and carry up his

hand-baggage. If he has not already disposed of his 'baggage-checks' in the way described at p. xviii, he should now give them to the clerk and ask to have his trunks fetched from the station and sent up to his room. If he has already parted with his checks, he identifies his baggage in the hall when it arrives and tells the head-porter what room he wishes it sent to. On entering the dining-room the visitor is shown to his seat by the head-waiter, instead of selecting the first vacant seat that suits his fancy. The table-waiter then hands the guest the menu of the day, from which (in hotels on the American plan) he orders what he chooses. Many Americans order the whole of their meals at once, but this is by no means necessary except in primitive localities or inferior hotels. The key of the bedroom should always be left at the office when the visitor goes out. Guests do not leave their boots at the bedroom door to be blacked as in Europe (except in the first-class houses), but will find a 'boot-black' in the toilette-room (fee 10 c.; elsewhere 5 c.). Large American hotels also generally contain a barber's shop (shave 20-25 c.; elsewhere 10-15 c.), railway-ticket, express, telegraph, telephone, messenger-service, type-writing, theatrical, and livery offices, book-stalls, etc. In many large hotels all telegrams coming for guests before their arrival are placed in a box on the hotel-clerk's counter, and each guest is expected to look through these for himself.

The following hints may be useful to hotel-keepers who wish to meet the tastes of European visitors. The wash-basins in the bedrooms should be much larger than is generally the case. Two or three large towels are preferable to the half-dozen small ones usually provided. A carafe or jug of fresh drinking water (not necessarily iced) and a tumbler should always be kept in each bedroom. If it were possible to give baths more easily and cheaply, it would be a great boon to English visitors. It is now, fortunately, more usual than of yore for the price of a bedroom to include access to a general bathroom; but those who wish a private bath in or attached to their bedroom must still pay about $1 (4*s.*) a day extra. No hotel can be considered first-class or receive an asterisk of commendation that refuses to supply food to travellers who are prevented from appearing at the regular meal-hours.

Boarding Houses. For a stay of more than a day or two the visitor will sometimes find it convenient and more economical to live at a *Boarding House*. These abound everywhere and can easily be found on inquiry. Their rates vary from about $ 8 a week upwards. At many places the keepers of such houses also receive transient guests, and they are generally preferable to inferior hotels. — *Furnished Rooms* are easily procured in the larger cities, from $ 3-4 a week upwards (comp. p. 14). Soap, curiously enough, though provided in hotels, is not provided in boarding-houses or lodgings.

Restaurants. In New York and other large cities the traveller will find many excellent restaurants, but in other places he will do well to take his meals at his hotel or boarding-house. Restaurants are attached to all hotels on the European plan (p. xxiii). A single traveller will generally find the *à la carte* restaurants rather expensive, but one portion will usually be found enough for two guests and two portions ample for three. The *table d'hôte* restaurants, on the other hand, often give excellent value for their charges (comp. p. 14).

Soup, fish, poultry, game, and sweet dishes are generally good; but the beef and mutton are often inferior to those of England. Oysters, served in a great variety of styles, are large, plentiful, and comparatively cheap. In America wine or beer is much less frequently drunk at meals than in Europe, and the visitor is not expected to order liquor 'for the good

of the house'. Iced water is the universal beverage, and a cup of tea or coffee is included in all meals at a fixed price. Wine is generally poor or dear, and often both. It is much to be regretted that, outside of California, the native vintages, which are often superior to the cheap imported wines, seldom appear on the wine-list; and travellers will do good service by making a point of demanding Californian wines and expressing surprise when they cannot be furnished. Liquors of all kinds are sold at *Saloons* (public houses) and *Hotel Bars* (comp. p. 15). Restaurants which solicit the patronage of 'gents' should be avoided. The meals on dining-cars and 'buffet cars' are generally preferable to those at railway-restaurants. Tipping the waiter is, perhaps, not so general as in Europe, but is usually found serviceable where several meals are taken at the same place. Cafés, in the European sense, are seldom found in the United States except in New Orleans (p. 631) and a few other cities with a large French or German element in the population. The name, however, is constantly used as the equivalent of restaurant and is sometimes applied to first-class bar-rooms.

VI. Post and Telegraph Offices.

Post Office. The regulations of the American postal service are essentially similar to those of Great Britain, though the practice of delivering letters at the houses of the addressees has not been uniformly extended to the rural districts. The service is, perhaps, not quite so prompt and accurate. The supply of letter-boxes is generally abundant, but the number of fully equipped post-offices is much lower (proportionately) than in England. Stamps are sold at all drug-stores and hotels, and often by letter-carriers.

All 'mailable' matter for transmission within the United States and to Canada, Cuba, Porto Rico, and Mexico is divided into four classes: 1st. Letters and all Sealed Packets (rate of postage 2 c. per oz. or fraction thereof); 2nd. Newspapers and Periodicals (1 c. per 4 oz.); 3rd. Books, etc. (1 c. per 2 oz.); 4th. Merchandise and Samples (1 c. per oz.). Postal cards 1 c.; reply postal cards 2 c. A 'special delivery stamp' (10 c.) affixed to a letter, in addition to the ordinary postage, entitles it to immediate delivery by special messenger within certain limits. For this purpose ordinary stamps to the same value may also be used, with the words 'Special Delivery' added. Letters to countries in the Postal Union cost 5 c. for the first oz. and 3 c. for each additional oz., postal cards 2 c., reply postal cards 4 c., books and newspapers 1 c. per 2 oz. Letters to Great Britain and Germany, however, are sent at the domestic rate (2 c. per oz.). Reply coupons are now issued, exchangeable for stamps in the country of destination. The *Registration Fee* is 8 c.; the stamp must be affixed to the letter before presentation for registration, and the name and address of the sender must be written on the envelope. Undeliverable letters will be returned free to the sender, if a request to that effect be written or printed on the envelope.

Domestic Money Orders are issued by money-order post-offices for any amount up to $100, at the following rates: for sums not exceeding $2½, 3 c.; $2½-5, 5 c.; $5-10, 8 c.; $10-20, 10 c.; $20-30, 12 c.; $30-40, 15 c.; $40-50, 18 c.; $50-60, 20 c.; $60-75, 25 c.; $75-100, 30 c. For strangers these are not so convenient as the money-orders of the *Express Companies* (comp. p. xiii), as identification of the payee is demanded. — *Foreign Money Orders* cost from 5c. to 10 c. for each $10 (for Great Britain and its Colonies 10 c.).

Telegraph Offices. The telegraphs of the United States are largely in the hands of the *Western Union Telegraph Co.*, with its headquarters in New York (p. 20), and the service is neither so cheap nor so prompt and trustworthy as that of Great Britain. At the beginning of 1907 this company owned 205,646 M. of line and 1,321,199 M. of wire, while the number of despatches sent by it in

1907 was 74,804,551. The *Postal Telegraph Cable Co.* has 60,216 M. of line and 350,127 M. of wire and sends about 25,000,000 messages annually. The rates from New York are given at p. 20, and from these may be roughly estimated the probable rates from other parts of the country. — In 1907 the United States contained about 6,000,000 M. of *Telephone Wires*, with 7,107,936 telephones (comp. p. 20). Telephones are in operation in all the large, and many of the small, towns throughout the country. The total annual number of telephone messages is over 9,000,000,000, as compared with 725,000,000 in the British Isles and 1,207,000,000 in Germany.

VII. Glossary.

The following short list of words in frequent use in the United States in a sense not commonly known in England may be found of service. The speech of the cultivated American, of course, varies little from the speech of the cultivated Englishman, and no misunderstanding is likely to arise in their verbal intercourse; but it will not unfrequently be found that railway-officials, cabmen, waiters, and the like do not know what is meant by the British equivalents of the following expressions. It must not be understood that the under-noted words are all in use throughout the whole of the United States. A New Englander, for instance, may tell you that 'he never heard such a word', when you use a term in regular use by all classes in the West or South. The list, which might be extended indefinitely, does not attempt to enumerate the local names for different kinds of food, implements. etc.; nor does it mean to include words that are solely and avowedly 'slang'. Purely technical terms are also avoided. Comp. p. xviii (railway terms), p. xxiii, etc.

Bed-spread, coverlet, counterpane.
Biscuit, hot tea-rolls.
Bit (California and the South), 12½ c. (two bits 25 c., six bits 75 c.).
Blind, shutter.
Block, rectangular mass of building bounded by four streets.
Boots, used only of boots coming up wholly or nearly to the knee. Comp. *Shoes* and *Ties*.
Boss, master, head, person in authority.
Bowl, basin (*Set Bowl*, fixed-in basin).
Bright, clever.
Broncho, native (Western) horse.
Bug, beetle, insect of almost any kind.
Bureau, chest of drawers.
Burro (California and the South West), donkey.
Calico, printed cotton cloth.
Carom, cannon (at billiards).
Chore, odd job about a house done by a *man* (the masculine of *char*).
Chowder, a kind of thick fish soup.
City, corporate town or municipal borough.
Clerk, shopman.
Clever, good-natured.
Corn, Maize or Indian corn.
Cowboy, cattle herdsman.
Cracker, biscuit; also, in the Southern States, a poor white man.
Creek (often pron. crick), a small stream.
Cunning, neat, pretty, tiny (mainly of children or small pet animals). *Cute* is often used in much the same sense.
Cuspidor, spittoon.
Cutter, light, one-horse sleigh.
Deck, pack of cards (used by Shakspeare).
Dirt, earth, soil (*e.g.*, a 'dirt tennis-court').
Drummer, commercial traveller.
Dry Goods, dress materials, drapery, etc.
Dumb (often), stupid (Ger. *dumm*).

Elevator, lift.
Fall, autumn.
Fix, to arrange, make, put in order, settle, see to, etc.
Fleshy, stout.
Floor-walker, shop-walker.
Grip or *Grip-sack*, hand-bag.
Gums, overshoes (see *Rubbers*).
Gun, to go shooting.
Hack, cab; *hackman*, cabman.
Help, servant.
High Ball, whiskey and soda.
Hitch up, to harness; *hitching-post*, post to tie horses to.
Horse Car, tramway-car.
Hunt, to go shooting.
Lines, reins.
Lot, a piece or division of land in a city.
Lovely, loveable.
Lumber, wood, timber. ('Timber' in American usage means the heavy logs, while 'lumber' is a more general term.)
Lunch, a slight meal at any hour of the day.
Mad, vexed, cross.
Mail, to post; postal matter; postal service.
Mucilage, liquid gum.
Muslin, cotton cloth.
Nasty, disgusting (not used before 'ears polite').
Notions, small wares.
Observatory (often), belvedere or view-tower (Ger. *Aussichtsturm*).
Parlor, drawing-room.
Piazza, veranda.
Pie, tart or pie.
Pitcher, jug.
Prince Albert (coat), frock-coat.
Rapid Transit, a general name for elevated railroads and similar means of rapid city and suburban locomotion.
Recitation, lesson, college lecture.
Ride, applied to any mode of conveyance (horse, carriage, boat, etc.).
Right away, directly.
Rock, stone of any size; to throw stones.
Rooster, cock.
Rubbers, galoshes, overshoes.
Run, to manage, carry on (a business, etc.).
Sack, *Sacque*, jacket.
Safe, larder (meat-safe, etc.).
Shine, to black or polish (boots).
Ship, to send goods by train as well by sea.
Shoes, used for boots not coming above the top of the ancle.
Shortage, deficiency.
Sick, ill.
Sophomore, student in his second year at college. Students of the first, third, and fourth years are named *Freshmen*, *Juniors*, and *Seniors*.
Span, pair of horses.
Spool (of cotton), reel (of thread).
Stage, coach, omnibus.
Store, shop.
Street Car, tramway-car.
Take out. An American takes a lady 'out' to dinner, while an Englishman takes her 'in'.
Team, often applied to *one* horse.
Telegraph Blank, telegraph form.
Ties, low shoes; railway sleepers.
Town, township or parish (thus one hears of the highest mountain or the best crop in the town).
Track, railway-line.
Trolley, electric tramway with overhead wire.
Tuxedo, dinner-jacket.
Ugly, ill-tempered, malicious.
Under-waist, bodice.
Wagon, carriage.
Waist, body (of a dress).
Wait on (table), wait at.
Wilt, fade, wither.
Window-shade, blind.

In the United States *First Floor* is usually synonymous with *Ground Floor*, while *Second Floor* corresponds to the English *First Floor*, and so on. Throughout the Handbook these terms are used in conformity with the English custom.

VIII. General Hints.

The first requisites for the enjoyment of a tour in the United States are an absence of prejudice and a willingness to accommodate oneself to the customs of the country. If the traveller exercise a little patience, he will often find that ways which strike him as unreasonable or even disagreeable are more suitable to the environment than those of his own home would be. He should from the outset reconcile himself to the absence of deference or servility

on the part of those he considers his social inferiors; but if ready himself to be courteous on a footing of equality he will seldom meet any real impoliteness. In a great many ways travelling in the United States is, to one who understands it, more comfortable than in Europe. The average Englishman will probably find the chief physical discomforts in the dirt of the city streets, the roughness of the country roads, the winter overheating of hotels and railway-cars (70-80° Fahr. being by no means unusual), the dust, flies, and mosquitoes of summer, and (in many places) the habit of spitting on the floor; but the Americans themselves are now keenly alive to these weak points and are doing their best to remove them.

Throughout almost the whole country travelling is now as safe as in the most civilized parts of Europe, and the carrying of arms, which indeed is forbidden in many States, is as unnecessary here as there. In many of the western towns, however, it is advisable to avoid the less reputable quarters and to refrain from entering any shops, barber's rooms, or the like except those undeniably of the best class. Those who contemplate excursions into districts remote from the highways of travel should take local advice as to their equipment. — The social forms of America are, in their essentials, similar to those of England; and the visitor will do well to disabuse himself of the idea that laxity in their observance will be less objectionable in the one country than in the other. He will, of course, find various minor differences in different parts of the country, but good manners will nowhere be at a discount. — No limit is placed on the number of passengers admitted to public conveyances, and straps are provided in the cars of tramways and elevarted railways to enable those who cannot obtain seats to maintain their equrlibrium. — The prices of many manufactured goods are much highei in the United States than in Europe; and the traveller should therefore come provided with an ample supply of all the articles of personal use he or she is likely to require, down to such small items as pins and needles, tapes and ribbons, dress ties and gloves, toilette requisites, buttons, and matches (often very poor in America). An important exception to the above rule is boots and shoes, which are excellently made in the United States and cost, if anything, rather less than in England. Cotton goods are also as cheap as in Europe. — Indoor clothing for American use should be rather thinner in texture than is usual in England, but winter wraps for outdoor use require to be much thicker. The thick woollen gowns that English ladies wear in winter would be uncomfortably warm in the ordinary winter temperature of American hotels and railway-carirages; and a thin soft silk will, perhaps, be found the most comfortable travelling dress on account of its non-absorption of dust. Overshoes ('arctics' and 'rubbers') are quite necessary in winter and are worn almost as much by men as by women. — Weddings frequently take place in the evening, and are managed by a set of 'ushers' chosen from the bridegroom's friends. — The rule of the road in America follows the Continental, not the English system, vehicles passing each other to the right.

The art of the *Barber and Hair-Dresser* has been developed to a high point in the United States, where the 'tonsorial saloons' are often very luxurious. The prices, however, are high (10-25 c. for a shave, including hair-brushing and the application of essences; hair-cutting 25-35 c., shampooing 15-25 c., 'sea foam' or 'dry shampoo' 10-20 c., etc.).

Public Conveniences are not usually provided in American cities, but their place is practically supplied by the lavatories of hotels, to which passers-by resort freely. Accommodation is also furnished at railway stations. Such public conveniences as do exist in New York and other large cities are disgracefully inadequate in number, size. and equipment.

The *Drinking Water* of some of the cities in the United States is not all that it ought to be, and it is often advisable to make inquiries on this point.

Public Holidays. The only holidays observed in all the states are Independence Day (July 4th) and Christmas Day (Dec. 25th). New Year's Day (Jan. 1st) and Washington's Birthday (Feb. 22nd) are celebrated in nearly all the states. Decoration Day (May 30th) is set apart in the N. and W. states for decorating with flowers the graves of those who fell in the Civil War; and some of the S. states have a Memorial Day for the same purpose. Thanksgiving Day (last Thurs. in Nov.) is observed with practical unanimity; and General Election Day (Tues. after the first Mon. in Nov.) and Labor Day (first Mon. in Sept.) are each celebrated by a large number of states. In addition to the above, some states have special holidays of their own.

IX. A Short History of American Politics,

by

John Bach McMaster.

What is now the territory of the United States has been derived from six European nations. Resting on the discovery by Columbus, and the Bulls of the Popes, Spain claimed the whole Continent, but has been in actual possession only of the Gulf coast from Florida to Texas, and of the interior from the Mississippi to the Pacific. The Swedes once had settlements on the Delaware. The Dutch, following up the voyage of Hudson to the river bearing his name, claimed and held the country from the Delaware to the Connecticut. The French discovered the St. Lawrence and explored and held military possession of the valleys of the Mississippi and Ohio and the Great Lakes. The English by virtue of the voyages of the Cabots claimed the Atlantic coast and there founded the colonies which grew into the thirteen United States. Alaska was purchased from Russia.

In the course of the struggle, sometimes peaceful, often bloody, by which the rule of these nations has been thrown off, the Dutch conquered the Swedes; the English conquered the Dutch and the French; the United States expelled the English and in time by purchase or conquest drove out the Spaniards and the Mexicans.

The first serious struggle for possession occurred in the middle of the 18th century, when the English moving westward met the French moving eastward at the sources of the river Ohio. In that struggle which has come down to us as the 'French and Indian War' France was worsted and, retiring from this continent, divided her possessions between England and Spain. To England she gave Canada and the islands and shores of the Gulf of St. Lawrence and, entering what is now the United States, drew a line down the middle of the Mississippi River and gave all to the E. of that line (save the island on which is the city of New Orleans) to Great Britain, and all to the W. of it to Spain; Spain at the same time gave Florida to England as the price of Cuba.

Having thus come into possession of all the country to the E. of the Great River, King George determined to send out an army of 10,000 men to defend the colonies, and have the latter bear a part

of the expense. This part he attempted to collect by duties on goods imported and by a Stamp Tax (1765) on legal documents and printed matter. No tax for revenue had before been laid on America by act of Parliament. The colonists therefore resisted this first attempt and raising the cry 'no taxation without representation' they forced Parliament to repeal the Stamp Tax in 1766. The right to tax was at the same time distinctly asserted, and in 1767 was again used, and duties laid on paints, oils, lead, glass, and tea. Once more the colonists resisted and, by refusing to import any goods, cwares, or merchandise of English make, so distressed the manufa turers of England that Parliament repealed every tax save that onatea. All the tea needed in America was now smuggled in from Holl nd. The East India Company, deprived of the American market, became embarrassed, and, calling on Parliament for aid, was suffered to export tea, a privilege never before enjoyed. Selecting commissioners in Boston, New York, Philadelphia, and Charleston, cargoes of tea were duly consigned to them; but the people would not allow a pound of it to be sold. At Boston men disguised as Indians boarded the tea ships and threw the boxes into the harbour (p. 263).

As a punishment for this, Parliament shut the port of Boston and deprived the people of Massachusetts of many functions of local government. The Assembly of Massachusetts thereupon called for a General Congress to meet at Philadelphia on Sept. 5th, 1774. The colonies gladly responded and this Congress, having issued a Declaration of Rights and addresses to the King, to Parliament, and to the People of England, adjourned to await the result. The day for the reassembling of Congress was May 10th, 1775; but before that day came, the attempt of *Gage* to seize military stores brought on a fight at Lexington (April 19th, 1775; p. 308). The fight at Lexington was followed by the siege of the British in Boston, by the formation of the 'Continental Army', by the appointment of *George Washington* to command it, by the battle of Bunker Hill (June 17th, 1775; p. 273), and by an expedition against Quebec, which came to naught, on the last day of the year.

General William Howe meantime had succeeded Gage in command of the British at Boston, and, finding himself hard pressed by Washington, evacuated the city (comp. pp. 274, 258) and sailed for Halifax. Believing New York was to be attacked, Washington now hurried to Long Island, where (August 27th, 1776; p. 79) Howe defeated him, took possession of New York, and drove him first up the Hudson and then southward across New Jersey.

Congress, which (July 4th, 1776) had declared the colonies to be free and independent states, now fled from Philadelphia to Baltimore. But Washington, turning in his retreat, surprised and captured the British outpost at Trenton (p. 157). *Cornwallis* instantly hurried toward that town, but W shington, passing around the British rear, attacked and captured (at Princeton, Jan. 3rd, 1777; p. 157) a

detachment on its march to Trenton, and then went into winter quarters at Morristown.

With the return of spring Howe, finding that he could not reach Philadelphia by land without passing in front of the Continental Army stretched out on a strongly intrenched line across New Jersey, went by sea. Washington met him at Chadd's Ford on the Brandywine (p. 202), was defeated, and on Sept. 25th, 1777, Howe entered Philadelphia. In the attempt to dislodge him Washington fought and lost the battle of Germantown (Oct. 4th, 1777; p. 175). The loss of Philadelphia was more than made good by the capture of *Burgoyne* and his army at Saratoga (Oct. 17th, 1777, p. 120), while on his way from Canada to New York City.

The fruits of this victory were the recognition of the Independence of the United States by France, the treaty of alliance with France (Feb. 8th, 1778), and the evacuation of Philadelphia by *Clinton*, who had succeeded Howe. Washington, who had spent the winter at Valley Forge (p. 186), instantly followed, and overtaking Clinton at Monmouth fought and won the battle at that place (June 29th, 1778). Clinton escaped to New York, and Washington, drawing his army in a circle about the city from Morristown on the S. to West Point on the N., awaited further movements.

Turning towards the Southern States, the British commander now despatched an expedition which took Savannah and overran the State of Georgia. The year which followed (1779) is memorable for the capture of Stony Point by *Anthony Wayne* (p. 83), for the treason of *Benedict Arnold* (pp. 83, 84, 89), for the execution of *Major John André* (pp. 83, 87), for the capture of the Serapis by *Paul Jones* after one of the most desperate naval battles on record, and by the failure of an attempt by the Americans to retake Savannah (p. 609). In 1780 Clinton led an expedition from New York to Charleston, took the city, swept over South Carolina, and, leaving Cornwallis in command, hurried back to New York. *Gates*, who now attempted to dislodge the British, was beaten. *Greene* now succeeded Gates, and *Morgan*, the commander of his light troops, won the battle of the Cowpens (Jan. 17th, 1781; p. 571). This victory brought up Cornwallis, who chased Greene across the State of North Carolina to Guilford Court House (p. 570), where Greene was beaten and Cornwallis forced to retreat to Wilmington. Moving southward, Greene was again beaten in two pitched battles, but forced the British to withdraw within their lines at Charleston and Savannah.

Cornwallis meantime moved from Wilmington into Virginia and took possession of Yorktown. And now Washington, who had long been watching New York, again took the offensive, hurried across New Jersey and Pennsylvania, and, while a French fleet closed the Chesapeake Bay, he besieged Cornwallis by land, till (Oct. 19th, 1781) the British General surrendered (p. 559). This practically ended the war.

The Treaty of Peace, in 1783, actually ended it, secured the independence of the United States and fixed her boundaries, roughly speaking, as the Atlantic Ocean on the E., the Mississippi on the W., New Brunswick, the St. Lawrence, and the Great Lakes on the N., and the parallel of 31° on the S.

While the war was still raging, Congress had framed an instrument of government, which the States ratified and put in force on March 1st, 1781. This instrument of government which bound the thirteen States in perpetual union was known as the Articles of Confederation, and established a government as bad as any yet devised by man. There was no executive, no judiciary, and only the semblance of a legislature. The Congress consisted of not more than seven nor less than two delegates from each State; sat in secret session; was presided over by a President elected from its own members; and could not pass any law unless the delegates of nine states assented. It could wage war, make treaties, and borrow money; but it could not lay a tax of any kind whatsoever; nor regulate commerce between the States, or with foreign powers; and was dependent entirely on the liberality of the States for revenue. This defect proved fatal. Inability to regulate foreign commerce by duties stripped the country of its specie. Lack of specie forced the States to issue paper money. Paper money was followed by tender acts and force acts and, in some places, by a violent stoppage of justice by the debtor class. A commercial and financial crisis followed and the people of the States, reduced to desperation, gladly acceded to a call for a national trade convention which met in Philadelphia in May, 1787. The instructions of the delegates bade them suggest amendments to the Articles of Confederation. But the convention, considering the Articles too bad to be mended, framed the Constitution which the people, acting through conventions in the various states, ratified during 1787 and 1788.

On March 4th, 1789, the Constitution became the 'supreme law of the land.' In the first congress no trace of party lines is visible. But the work of establishing government had not gone far when differences of opinion sprang up; when the cry of partial legislation was raised, and the people all over the country began to divide into two great parties, — those who favoured and those who opposed a liberal construction of the language of the Constitution and the establishment of a strong national government. The friends of national government took the name of Federalists, and under the lead of *Alexander Hamilton* who, as Secretary of the Treasury, marked out the financial policy of the administration, they funded the foreign and domestic debt occasioned by the war for independence, assumed the debts incurred by the States in that struggle, set up a national bank with branches, and laid a tax on distilled liquors. Each one of these acts was met with violent opposition as designed to benefit a class, as unconstitutional, and as highly detrimental

to the interests of the South. Against the Federalists were now brought charges of a leaning towards monarchy and aristocracy. Great Britain it was said has a funded debt, a bank, and an excise. These things are, therefore, monarchical institutions. But the Federalists have introduced them into the United States. The Federalists, therefore, are aristocrats, monarchists, and monopolists.

Of all who believed these charges, none believed them more sincerely than *Thomas Jefferson*, Secretary of State. Seeing in these acts a wide departure from the true principles of democracy, he set himself to work to organize a party of opposition, and was soon looked up to as the recognized leader of the Federal Republicans. Hardly had the two parties thus been called into existence by difference of opinion on questions of home affairs, when they were parted yet more widely, and the dispute between them intensely embittered by questions of foreign affairs. In 1793 the French Republic declared war against England, and sent a minister to the United States. As the United States was bound to France by the Treaty of Alliance and by a Treaty of Amity and Commerce, and was not bound to Great Britain by any commercial treaty whatever, it seemed not unlikely that she would be dragged unwillingly into the war. But Washington with the advice of his secretaries proclaimed neutrality, and from that time every Republican was the firm friend of France and every Federalist the ally of England. Then began a seven years' struggle for neutrality. France threw open her colonial ports to neutral commerce. Great Britain asserting the 'Rule of the War of 1756', a rule prescribing that no neutral should have, in time of war, a trade it did not have in peace, declared this trade was contraband and seized the ships of the United States engaged in it. The Republicans denounced neutrality and attempted to force a war. The Federalists in alarm dispatched *John Jay*, the Chief Justice, to London with offers of a commercial treaty. England responded and on Feb. 29th, 1796, the first treaty of Amity and Commerce between her and the United States became law. At this France took offence, rejected the new minister (C. C. Pinckney) from the United States, and drove him from her soil; suspended the treaties, insulted a special commission (sent out in the interest of peace), with demands for bribes and tribute, and brought on a quasi-war. Never since the days of Bunker Hill had the country been so stirred as this act of the French Directory stirred it in the summer of 1798. Then was written our national song 'Hail Columbia'. Then was established the department of the Navy. Then, under the cry, 'Millions for defence; not a cent for tribute', went forth that gallant little fleet which humbled the tricolour in the West Indies and brought France to her senses.

With the elevation of Napoleon to the First Consulship came peace in 1800. In that same year the Federalists fell from power never to return. Once in power, the Republicans began to carry

out the principles they had so long preached. They reduced the National debt; they repealed the internal taxes. They sold the Navy; boldly assaulted the Supreme Court; and in 1811, when the Charter of the National Bank expired, refused to renew it. Their doctrine of strict construction, however, was ruined, when, in 1803, they bought the Province of Louisiana from France and added to the public domain that splendid region which lies between the Mississippi and the Rocky Mountains. At that moment it seemed as if the people were about to enter on a career of unwonted prosperity. But Napoleon suddenly made war on England, and by 1806 the United States was involved in a desperate struggle of nine years both with France and England for commercial independence. Great Britain searched our ships, impressed our sailors, violated the neutrality of our ports, and by the decisions of her admiralty courts and by orders in council sought to ruin our neutral commerce with Europe, unless carried on through her ports and under her license. Napoleon attacked us with his decrees of Berlin and Milan, and sought to ruin our neutral commerce with England. The United States retaliated by means of the Embargo and Non-intercourse, and, in 1812, by declared war.

With the cessation of hostilities another epoch in our history begins. From the day when Washington proclaimed neutrality in 1793, to the day when the people celebrated, with bonfires and with fireworks, and with public dinners, the return of peace in 1815, the political and industrial history of the United States is deeply affected by the political history of Europe. It was questions of foreign policy, not of domestic policy that divided the two parties, that took up the time of Congress, that raised up and pulled down politicians. But after 1815 foreign affairs sank into insignificance, and for the next thirty years the history of the United States is the history of the political and economic development of the country to the E. of the Mississippi River.

The opposition which the Federalists made to the War completed their ruin. In 1816 for the last time they put forward a presidential candidate, carried three states out of nineteen, and expired in the effort. During the eight years of *Monroe's* administration (1817-25) but one great and harmonious party ruled the political destinies of the country. This remarkable period has come down to us in history as the 'Era of good feeling'. It was indeed such an era, and so good were the feelings that in 1820 when Monroe was re-elected no competitor was named to run against him. Every State, every electoral vote save one was his. Even that one was his. But the elector who controlled it, threw it away on John Quincy Adams lest Monroe should have the unanimous vote of the Presidential electors, an honour which has been bestowed on no man save Washington.

In the midst of this harmony, however, events were fast ripen-

ing for a great schism. Under the protection offered by the commercial restrictions which began with the Embargo and ended with the peace, manufactures had sprung up and flourished. If they were to continue to flourish they must continue to be protected, and the question of free trade and protection rose for the first time into really national importance. The rush of population into the West led to the admission of Indiana (1816), Mississippi (1817), Illinois (1818), Alabama (1819), and Missouri (1820) into the Union, and brought up for serious discussion the uses to be made of public lands lying within them. The steamboat, which had been adopted far and wide, had produced a demand for some improved means of communication by land to join the great water highways of the country and opened the era of internal improvements. The application of Missouri for admission into the Union brought up the question of the admission of slavery to the W. of the Mississippi. A series of decisions of the Supreme Court, setting aside acts of the State legislatures, gave new prominence to the question of State rights.

The Missouri question was settled by the famous Compromise of 1820 (the first great political compromise) which drew the line 36° 30′ from the Mississippi to the 100th Meridian, and pledged all to the N. of it, save Missouri, to freedom. But the others were not to be settled by compromise, and in the campaign of 1824 the once harmonious Republican party was rent in pieces. Each of the four quarters of the Republic put a candidate in the field and 'the scrub-race for the presidency' began. The new manufacturing interests of the East put forward *John Quincy Adams*. The West, demanding internal improvements at public expense, had for its candidate *Henry Clay*. *William H. Crawford* of Georgia (nominated by a caucus of congressmen) represented the old Republican party of the South. *Andrew Jackson* of Tennessee stood for the new Democracy, for the people, with all their hatred of monopolies and class control, their prejudices, their half-formed notions, their violent outbursts of feeling. Behind none of them was there an organized party. But taking the name of 'Adams men' and 'Clay men', 'Crawford men' and 'Jackson men', the friends of each entered the campaign and lost it. No candidate secured a majority of the electorial college, and the House of Representatives chose John Quincy Adams.

Under the administration of Adams (1825-29) the men who wished for protection and the men who wished for internal improvements at Government expense united, took the name first of National Republicans and then of Whigs, and, led on by Henry Clay and *Daniel Webster*, carried through the high protection tariffs of 1828 and 1832. The friends of Jackson and Crawford took the name of Democrats, won the election of 1829, and, during twelve years, governed the country. In the course of these years the population of the United States rose to 17,000,000, and the number of

states to twenty-six. Steam navigation began on the Ocean; two thousand miles of railroad were built in the land; new inventions came into use; and the social and industrial life of the people was completely revolutionized. The National debt was paid; a surplus accumulated in the Treasury; the sale of public lands rose from $3,000,000 in 1831 to $25,000,000 in 1836; and the rage for internal improvements burned more fiercely than ever. A great financial panic spread over the country; the Charter of the National Bank expired; a hundred 'wild-cat banks' sprang up to take its place; and the question of the abolition of slavery became troublesome.

On the great questions which grew out of this condition of affairs the position of the two parties was well defined. The Democrats demanded a strict construction of the Constitution; no internal improvements at public expense; a surrender of the public lands to the state in which they lay; no tariff for protection; no National Bank; no agitation of the question of abolition of slavery; the establishment of sub-treasuries for the safe keeping of the public funds, and the distribution of the surplus revenue. The Whigs demanded a re-charter of the National Bank; a tariff for protection; the expenditure of the surplus on internal improvements; the distribution of the money derived from the sale of public lands; a limitation of the veto power of the President; and no removals from office for political reasons.

The Democrats, true to their principles, and having the power, carried them out. They destroyed the Bank; they defeated bill after bill for the construction of roads and canals; they distributed $38,000,000 of the surplus revenue among the states, and, by the cartage of immense sums of money from the East to the far distant West, hastened that inevitable financial crisis known as the 'panic of 1837'. Andrew Jackson had just been succeeded in the Presidency by *Martin Van Buren* (1837-41) and on him the storm burst in all its fury. But he stood it bravely, held to a strict construction of the Constitution, insisted that the panic would right itself without interference by the Government, and stoutly refused to meddle. Since the refusal of Congress to re-charter the Bank of the United States, whose charter expired in 1836, the revenue of the Government had been deposited in certain 'pet banks' designated by the Secretary of the Treasury. Every one of them failed in the panic of 1837. Van Buren, therefore, recommended 'the divorce of Bank and State', and after a struggle of three years his friends carried the 'sub-treasury' scheme in 1840. This law cast off all connection between the State Banks and the Government, put the collectors of the revenue under heavy bonds to keep the money safely till called for by the Secretary of the Treasury, and limited payments to or by the United States to specie.

The year 1840 was presidential year and is memorable for the introduction of new political methods; for the rise of a new and

vigorous party; and for the appearance of a new political issue. The new machinery consisted in the permanent introduction of the National Convention for the nomination of a president, now used by the Democrats for the second time, and by the Whigs for the first; in the promulgation of a party platform by the convention, now used by the Democrats for the first time; and in the use of mass meetings, processions, songs, and all the paraphernalia of a modern campaign by the Whigs. The new party was the Liberty Party and the new issue the 'absolute and unqualified divorce of the General Government from slavery, and the restoration of equality of rights among men'. The principles of that party were: slavery is against natural right, is strictly local, is a state institution, and derives no support from the authority of Congress, which has no power to set up or continue slavery anywhere; every treaty, every act, establishing, favouring, or continuing slavery in the District of Columbia, in the territories, on the high seas is, therefore, unconstitutional.

The candidate of this party was *James Gillespie Birney*. The Democrats nominated Martin Van Buren. The Whigs put forward *William Henry Harrison* and elected him. Harrison died one month after his inauguration, and *John Tyler*, the Vice-President, and a Democrat of the Calhoun wing became president. The Whig policy as sketched by Clay was the repeal of the sub-treasury act; the charter of a National Bank; a tariff for protection; and the distribution of the sales of public lands. To the repeal of the sub-treasury act Tyler gladly assented. To the establishment of a bank even when called 'Fiscal Corporation', he would not assent, and, having twice vetoed such bills, was read out of the party by a formal manifesto issued by Whig Congressmen. It mattered little, however, for the question of the hour was not the bank, nor the tariff, nor the distribution of the sales of lands, but the annexation of the Republic of Texas. Joined to the demand for the re-occupation of Oregon, it became the chief plank in the Democratic platform of 1844. The Whig platform said not a word on the subject, and the Liberty Party, turning with loathing from the cowardice of Clay, voted again for Birney, gave the State of New York to the Democrats, and with it the presidency. Accepting the result of the election as an 'instruction from the people', Congress passed the needed act and Tyler in the last hours of his administration declared Texas annexed.

The boundary of the new State was ill-defined. Texas claimed to the Rio Grande. Mexico would probably have acknowledged the Nueces River. The United States attempted to enforce the claim of Texas, sent troops to the Rio Grande, and so brought on the Mexican War. At its close the boundary of the United States was carried to the S. from 42° to the Gila River, and what is now California, Nevada, Arizona, New Mexico, Utah, and more than half of Wyoming and Colorado were added to the public domain. While the

war was still raging, *Polk*, who had succeeded Tyler, asked for $2,000,000 to aid him in negotiating peace. Well knowing that the money was to be used to buy land from Mexico, *David Wilmot* moved in the House of Representatives that from all territory bought with the money slavery should be excluded. This was the famous Wilmot proviso. It failed of adoption and the territory was acquired in 1848, with its character as to slavery or freedom wholly undetermined.

And now the old parties began to break up. Democrats who believed in the Wilmot proviso, and Whigs who detested the annexation of Texas, the war with Mexico, and the extension of slavery went over in a body to the Liberty Party, formed with it the 'Free-soil Party', nominated Martin Van Buren, and gave him 300,000 votes. In their platform they declared that Congress had no more power to make a slave than to make a king; that they accepted the issue thrust on them by the South; that to the demand for more slave states and more slave territories they answered, no more slave states, no more slave territories; and that on their banner was inscribed 'Free Soil, Free Speech, Free Labor, and Free Men'. As the defection of Whigs to the Liberty Party in 1844 gave New York State to the Democrats and elected Polk, so the defection of Democrats to the Free Soilers in 1848 gave New York to the Whigs and elected *Taylor*. As Harrison, the first Whig President, died one month after taking office, so Taylor, the second Whig President, died suddenly when a little over one year in office, just as the great Whig Compromise of 1850 was closing. The imperative need of civil government in the new territory, the discovery of gold in California, the rush of men from all parts of the earth to the Pacific Coast forced Congress to establish organized territories. The question was: shall they be opened or closed to slavery? But, as the soil had been free when acquired from Mexico, the question really was: shall the United States establish slavery? The Democrats, holding that slaves were property, claimed the right to take them into any territory, and asserting the principle of 'squatter sovereignty', claimed the right of the people living in any territory to settle for themselves whether it should be slave or free. The Free Soilers demanded that the soil having been free when a part of Mexico should be free as a part of the United States. Between these two Clay now stepped in to act as pacificator. Taking up the grievances of each side, he framed and carried through the measure known as the Compromise of 1850, the third great political Compromise in our history. The fruit of this was the admission of California, as a free state; the passage of a more stringent law for the recovery of fugitive slaves; the abolition of the slave trade in the District of Columbia; and the organization of Utah and New Mexico on the basis of 'squatter sovereignty'. This done, Senators and Representatives of all parties joined in a manifesto, declaring that the issues resting on slavery

were dead issues, and that they would neither vote for, nor work for any man who thought otherwise. But thousands did think otherwise. The action of Clay pleased none. Anti-slavery men deserted him in the North; pro-slavery men deserted him in the South; and in 1852 the Whig party carried but four states out of thirty-one and perished. Even its two great leaders Clay and Webster were, by that time, in their graves.

Excited by such success, the Democrats, led on by *Stephen A. Douglas*, now broke through the compromise of 1820 and in 1854 applied 'squatter sovereignty' to the organization of the territories of Kansas and Nebraska. Against this violation State legislatures, the people, the pulpit, and the press protested vigorously, for every acre of Kansas and Nebraska lay to the N. of 36° 30′ and was solemnly pledged to freedom. But the Democratic leaders would not listen and drove from their ranks another detachment of voters. The effect was soon manifest. The little parties began to unite and when, in 1856, the time came to elect another President, the Republican party of to-day was fully organized and ready. Once more and for the last time for 28 years the Democrats won. The administration of *James Buchanan* (1857-61) marks an epoch. The question before the country was that of the extension of slavery into the new territories. Hardly had he been inaugurated, when the Supreme Court handed down a decision on the case of Dred Scott, which denied the right of Congress to legislate on slavery, set aside the compromises of 1820 and 1850 as unconstitutional, and opened all the territories to slavery. From that moment the Whig and Democratic parties began to break up rapidly till, when 1860 came, four parties and four presidential candidates were in the field. The Democratic party, having finally split at the National Convention for nominating a president and vice-president, the southern wing put forward *Breckenridge* and *Lane* and demanded that Congress should protect slavery in the territories. The northern wing nominated *Stephen A. Douglas* and declared for squatter sovereignty and the Compromise of 1850. A third party, taking the name of 'Constitutional Union', declared for the Constitution and the Union at any price and no agitation of slavery, nominated *Bell* and *Everett*, and drew the support of the old Whigs of the Clay and Webster school. The Republicans, declaring that Congress should prohibit slavery in the territories, nominated *Abraham Lincoln* and *Hannibal Hamlin* and won the election.

The State of South Carolina immediately seceded and before the end of Feb., 1861, was followed by Georgia, Florida, Alabama, Mississippi, Louisiana, and Texas. Taking the name of the Confederate States of America, they formed first a temporary and then a permanent government, elected *Jefferson Davis* President, raised an army and besieged Fort Sumter in Charleston Harbour. The attempt to relieve the fort brought on the bombardment and surrender (April 19th, 1861). The Confederate States were now joined by Virginia,

North Carolina, Arkansas, and Tennessee. Richmond was made the capital, and the Civil War opened in earnest.

The line of separation between the States then became the Potomac River, the Ohio River, and a line across S. Missouri and Indian Territory to New Mexico. Along this line the troops of the Union were drawn up in many places under many commanders Yet there were in the main but three great armies. That of the E. or Potomac under *Gen. McClellan;* that of the centre or the Ohio under *Gen. Buell;* that of the W. or Missouri under *Gen. Halleck.* In command of all as Lieutenant-General was *Winfield Scott.* Confronting them were the troops of the Confederacy, drawn up in three corresponding armies: that of N. Virginia under *Johnston* and *Lee*, that of the Cumberland under *Albert Sidney Johnston*, and that of the trans-Mississippi under *McCulloch* and *Price.*

Yielding to the demand of the North for the capture of Richmond before the Confederate congress could meet there (July 20th, 1861), *McDowell* went forth with thirty-eight thousand three-months volunteers to the ever memorable field of Bull Run (p. 569). But the serious campaigning did not begin until Jan., 1862. Then the whole line west of the Alleghenies (made up of the armies of Ohio and the Missouri), turning on Pittsburg as a centre, swept southward, captured Forts Henry and Donelson, defeated the Confederates at Shiloh (p. 579), captured Corinth (p. 579), took Island No. 10 (p. 430), and drove them from Fort Pillow. Meantime *Farragut* entered the Mississippi from the Gulf (see p. 632), passed Forts Jackson and St. Philip, captured New Orleans, and sent Commodore Davis up the river to take Memphis. Memphis fell June 6th, 1862, and, save for Vicksburg, the Mississippi was open to navigation. When the year closed, the Confederates had been driven to the E. into the mountains of Tennessee, where (Dec. 31st, 1862-Jan. 2nd, 1863) was fought the desperate and bloody battle of Murfreesboro' (p. 579). The Union troops won, and the Confederate army fell back to Chattanooga (p. 578).

With the Army of the Potomac meantime all had gone ill. The affair at Bull Run in July, 1861, had been followed by the transfer of the army to McClellan. But McClellan wasted time, wore out the patience of the North, and forced Lincoln to issue General Order No. 1 for a forward movement of all the armies on Feb. 22nd, 1862. Obedient to this McClellan began his 'Peninsula Campaign' against Richmond, was out-generaled by Lee, and was superseded by *Pope.* In the second battle of Bull Run (p. 569) Pope suffered so crushing a defeat that Lee ventured to cross the Potomac, enter Maryland, and encounter McClellan (who had been re-appointed) on the field of Antietam (p. 596). In that battle Lee was beaten and fled across the Potomac. But McClellan failed to follow up the victory and was removed, the command of the Army of the Potomac passing to *Burnside.* Burnside led it across the Potomac and the Rappahan-

nock and on Dec. 13th, 1862, lost the battle of Fredericksburg (p. 555) For this he was replaced by *Hooker*, who, May 2nd-4th, 1863, fough. and lost the battle of Chancellorsville (p. 555). Lee now again took the offensive, crossed the Potomac, entered Pennsylvania, and at Gettysburg met the Army of the Potomac under *Meade* (p. 193). On that field was fought the decisive battle of the war. Then (July 1st-4th, 1863) the backbone of the Confederacy was broken, and the two armies returned to their old positions in Virginia.

While Meade was beating Lee at Gettysburg, *Grant* captured Vicksburg (July 1st-3rd, 1863; see p. 587). For this he was sent to command the army of *Rosecrans*, then besieged by *Bragg* at Chattanooga (p. 578). Again success attended him and, in Nov., he stormed Lookout Mountain, defeated Bragg in the famous 'Battle above the Clouds' (p. 578), and drove him in disorder through the mountains. For these signal victories he was raised to the rank of Lieutenant-General (in 1864) and placed in command of the Armies of the United States.

That year is memorable for the great march of *Sherman* to the E. from Chattanooga to the sea (p. 609), for the victories of *Sheridan* in the Valley of the Shenandoah (p. 597), for the Wilderness Campaign of Grant (p. 555), the shutting up of Lee in Richmond, and by the re-election of Lincoln. His competitor was *General McClellan*, whom the northern Democrats put foward on the platform that the war was a failure and that peace should be made with the South. In the spring of 1865 came the retreat of Lee from Richmond, and on April 9th, his surrender at Appomattox Court House (p. 564). On April 14th, 1865, Lincoln was assassinated (p. 225), and *Andrew Johnson* became President.

With the succession of Johnson the era of Reconstruction, political and social, begins. The outcome of political reconstruction was the 13th, 14th, and 15th amendments to the Constitution of the United States, the impeachment of Andrew Johnson, and a long list of acts to protect and assist the Freedmen of the South. The outcome of social reconstruction was the rise of the Ku Klux Klan, the passage and use of the Force Act, and the dreadful condition of affairs which ruined the South for a decade.

In the North the effect of such measures was to split the Republican party and put seven Presidential candidates in the field in 1872. One represented the Temperance party; another the Labour party, denouncing Chinese labour and the non-taxation of Government land; a third was the Liberal Republican, demanding union, amnesty, and civil rights, accusing Grant of packing the Supreme Court in the interests of corporations, and calling for a repeal of the Ku Klux Laws. The Liberal Republicans having chosen *Horace Greeley* as their candidate, the Democrats accepted and endorsed him. But he pleased neither party and the discontented Liberals and the discontented Democrats each chose a candidate of their

own. The Republicans nominated Grant and elected him. His second term (1873-77) was the nadir of our politics, both State and National, and ended with the disputed election and the rise of the Independent or 'Greenback Party', demanding the repeal of the Act for the resumption of specie payments and the issue of United States 'greenback' notes, convertible into bonds, as the currency of the country. Double returns and doubtful returns from the S. States put the votes of thirteen electors in dispute. As the House was Democratic and the Senate Republican, the joint rule under which the Electoral votes had been counted since 1865 could not be adopted. A compromise was necessary and on Jan. 29th, 1877, the Electoral Commission of five Senators, five Representatives, and five Judges of the Supreme Court was created to decide on the doubtful returns. Of the fifteen eight were Republicans and seven Democrats, and by a strict party vote the thirteen Electoral votes were given to the Republicans and *Rutherford B. Hayes* declared elected.

The memorable events of his term (1877-81) were the resumption of specie payments on Jan. 1st, 1879; the passage of the Bland Silver Bill, restoring the silver dollar to the list of coins, making it legal tender, and providing for the coinage of not less than 2,000,000 nor more than 4,000,000 each month; and the rapid growth of the National or Greenback-Labour party. Hayes was followed in 1881 by *James A. Garfield*, whose contest with the Senators from New York over the distribution of patronage led to his assassination by the hand of a crazy applicant for office. *Chester A. Arthur* then became President, was followed in 1885 by *Grover Cleveland*, who was succeeded in 1889 by *Benjamin Harrison*, who was in turn succeeded in 1893 by Grover Cleveland. In 1897 *William McKinley* became President, and his first period of office was signalized by a war with Spain (1898) and the advent of the United States as a Colonial Power. McKinley was re-elected in 1901 but was soon after assassinated by an anarchist, thus making way for the vice-president, *Theodore Roosevelt.* Among the chief events during the first term of Theodore Roosevelt were the recognition by the United States of the newly created Republic of Panama (Nov., 1903), the consequent construction of the Panama Canal, and the holding of the Louisiana Purchase Exposition at St. Louis in 1904, to commemorate the great extension of territory mentioned at p. xxxiv. Roosevelt was elected for a second term in 1904. Among its chief events were the Treaty of Peace between Russia and Japan in 1905 (see p. 284) and the great earthquake and fire at San Francisco in 1906 (p. 511). In 1909 Roosevelt was succeeded by *William Taft.*

States and Territories of the United States.

States.	Area in sq. M.	Pop. in 1900
1. Alabama (Ala.)	51,540	1,828,697
2. Arkansas (Ark.)	53,045	1,311,564
3. California (Cal.)	156,172	1,485,053
4. Colorado (Colo.)	103,645	539,700
5. Connecticut (Ct.)	4,845	908,420
6. Delaware (Del.)	1,960	184,735
7. Florida (Fla.)	54,240	528,542
8. Georgia (Ga.)	58,980	2,216,331
9. Idaho (Idaho)	84,290	161,772
10. Illinois (Ill.)	56,000	4,821,550
11. Indiana (Ind.)	35,910	2,516,462
12. Iowa (Ia.)	55,475	2,231,853
13. Kansas (Kan.)	81,700	1,470,495
14. Kentucky (Ky.)	40,000	2,147,174
15. Louisiana (La.)	45,420	1,381,625
16. Maine (Me.)	29,895	694,466
17. Maryland (Md.)	9,860	1,188,044
18. Massachusetts (Mass.)	8,040	2,805,346
19. Michigan (Mich.)	57,430	2,420,982
20. Minnesota (Minn.)	79,205	1,751,394
21. Mississippi (Miss.)	46,340	1,551,270
22. Missouri (Mo.)	68,735	3,106,665
23. Montana (Mont.)	145,310	243,329
24. Nebraska (Neb.)	76,840	1,066,300
25. Nevada (Nev.)	109,740	42,335
26. New Hampshire (N. H.)	9,005	411,588
27. New Jersey (N. J.)	7,525	1,883,669
28. New York (N. Y.)	47,620	7,268,894
29. North Carolina (N. C.)	48,580	1,893,810
30. North Dakota (N. D.)	70,195	319,146
31. Ohio (O.)	40,760	4,157,545
32. Oklahoma (Okla.)	69,830	790,391
33. Oregon (Ore.)	94,560	413,536
34. Pennsylvania (Pa.)	44,985	6,302,115
35. Rhode Island (R. I.)	1,053	428,556
36. South Carolina (S. C.)	30,170	1,340,316
37. South Dakota (S. D.)	76,850	401,570
38. Tennessee (Tenn.)	41,750	2,020,616
39. Texas (Tex.)	262,290	3,048,710
40. Utah (Utah.)	82,190	276,749
41. Vermont (Vt.)	9,135	343,641
42. Virginia (Va.)	40,125	1,854,148
43. Washington (Wash.)	66,880	518,103
44. West Virginia (W. Va.)	24,645	958,800
45. Wisconsin (Wis.)	54,450	2,069,042
46. Wyoming (Wyo.)	97,575	92,531
Territories.		
Arizona (Ariz.)	112,920	122,931
New Mexico (N. Mex.)	122,460	195,310
District of Columbia (D. C.)	69	278,718
Alaska	590,884	63,592
Hawaii	6,449	154,001
Total:	3,567,572	76,212,132

The total population in 1908 was estimated at about 85,000,000.

Presidents of the United States.

1. George Washington 1789-97.
2. John Adams 1797-1801.
3. Thomas Jefferson 1801-09.
4. James Madison 1809-17.
5. James Monroe 1817-25.
6. John Quincy Adams 1825-29.
7. Andrew Jackson 1829-37.
8. Martin Van Buren 1837-41.
9. William H. Harrison 1841.
10. John Tyler 1841-45.
11. James K. Polk 1845-49.
12. Zachary Taylor 1849-50.
13. Millard Fillmore 1850-53.
14. Franklin Pierce 1853-57.
15. James Buchanan 1857-61.
16. Abraham Lincoln 1861-65.
17. Andrew Johnson 1865-69.
18. Ulysses S. Grant 1869-77.
19. Rutherford B. Hayes 1877-81.
20. James A. Garfield 1881.
21. Chester A. Arthur 1881-85.
22. Grover Cleveland 1885-89.
23. Benjamin Harrison 1889-93.
24. Grover Cleveland 1893-97.
25. William McKinley 1897-1901.
26. Theodore Roosevelt 1901-9.
27. William Taft 1909.

X. Constitution and Government of the United States,

by *James Bryce*,

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The United States form a Federal Republic — that is to say, a Republic created by the union of a number of separate commonwealths, each of which retains some powers of government though it has yielded others to the Federation as a whole. The circumstances under which this Union took place have been already described in the historical sketch. It was established by the adoption of an instrument called the Constitution drafted by a Convention which met at Philadelphia in 1787, accepted and ratified by the (then 13) States in the years 1788-91. The Constitution prescribes (1) the structure of the Federal Government and the respective functions of its several parts, (2) the powers of the Federal Government and restrictions imposed upon it, (3) the relations of the Federal Government to the States and of the States to one another, (4) certain restrictions imposed upon the States. It does not specify the powers of the States, because these are assumed as pre-existing; the States when they created the Federal Government having retained for themselves most of the powers which they previously enjoyed.

The Constitution is the supreme law of the land, binding everywhere upon all authorities and persons. It can be altered in either of two ways: (a) The Federal Legislature may by a two-thirds vote in each of the two Houses prepare amendments and send them to the States. If ratified by the State Legislatures or by Conventions (*i.e.* assemblies elected by the people for the purpose) in three-fourths of the States, they take effect and become part of the Constitution. (b) The legislatures of two-thirds of the States may require the Federal Legislature to call a Constitutional Convention to prepare amendments to the Constitution. These amendments when ratified by three-fourths of the State Legislatures or State Conventions (as the case may be), take effect as parts of the Constitution. Fifteen amendments have been actually made, all drafted by the Federal Legislature and ratified by the State Legislatures. As the States created the Federation and as they still exercise most of the ordinary functions of government, it is convenient to describe them first.

The States and their Government. There are now 46 States in the Union. Although differing very greatly in size, population, and character, they have all of them the same frame of government. In all of them this frame is regulated by a constitution which each State has enacted for itself and which, being the direct expression of the popular will, is the supreme law of the State, binding all authorities and persons therein. Such a constitution always contains a so-called Bill of Rights, declaring the general principles of the government and the primordial rights of the citizen, and usually contains also a great number of administrative and financial regulations

belonging to the sphere of ordinary law. The habit has grown up of late years of dealing, by means of these instruments, with most of the current questions on which public opinion calls for legislation. These constitutions are often changed by amendments which (in most States) are passed by the Legislature by certain prescribed majorities and then submitted to the vote of the people. When it is desired to make an entirely new constitution, a special body called a Convention is elected for the purpose, and the instrument drafted by it is almost invariably submitted to the people to be voted upon.

State Governments. The Legislature. In every State the Legislature consists of two bodies, both alike elected by the people, though in districts of different sizes. The smaller body (whose members are elected in the larger districts) is called the Senate and varies in number from 9 to 51. The larger body is usually called the Assembly or House of Representatives and varies in number from 21 to 321. The suffrage has now everywhere been extended to all adult males who have resided in a certain (usually a short) period within the State. In three States (Wyoming, Colorado, and Utah) it is enjoyed by women also and in several women vote at municipal or school committee elections. The Senate is usually elected for four years — sometimes, however, for three, two, or even one. The House is usually elected for two years. Both Houses have similar powers, save that in most States Money Bills must originate in the House of Representatives. The powers of these Legislatures are limited, and in the case of the newer constitutions very strictly limited, by the State Constitution. If they pass any statute contravening its provisions, or infringing any of the restrictions it has imposed, such a statute is void. All members of State Legislatures are paid, usually at the rate of about $ 5 a day. They are generally required by law and almost invariably required by custom to be resident in the district from which they are chosen.

These legislative bodies are not greatly respected, nor is a seat in them greatly desired by the better class of citizens. In a few States, such as New York, Pennsylvania, and Louisiana, there is a pretty large proportion of corrupt members.

The State Executive. In every State the head of the Executive is the Governor, elected by popular vote for a term of (rarely one) usually two, three, or even four years. He receives a salary of from $ 1000 to $ 10,000. He is responsible for the execution of the laws and the maintenance of order in the State, whose militia he commands. He has, except in four States, the right to veto any bill passed by the Legislature, but the bill may be re-passed over his veto by a majority (usually two-thirds) in both Houses. He is assisted by a Secretary of State and several other officials, who, however, are not named by him but elected directly by the people.

The State Judiciary. In eight States the Judges are appointed by the governor; in all the rest they are elected either by the people

or (in five States) by the State Legislature for terms varying, for the Superior judges, from two to twenty-one years, eight to ten years being the average. In four, however, they hold for life. Their salaries range from $2000 to $10,000 per annum, but in most states do not exceed $5000. Such salaries, coupled with the uncertainty of re-election, have been found too small to attract the best legal talent, and complaints are often made that the Bench is not as strong as the Bar which practises before it. Corruption, however, is rare, especially among the judges of the higher courts. There have not been more than three or four States in which it has been proved to exist, and in some of these it does not exist now. It is, of course, the function of the Courts to determine, when a case comes before them, the validity or invalidity of a State Statute which is alleged to transgress any provision of the State Constitution. Very frequently they are obliged to declare such statutes to be unconstitutional; and in this way the Legislature is effectively restrained from destroying the securities which the Constitution provides.

Local Government, Rural and Urban. The organization of local government is within the province of State Legislation and there are many differences between the systems in force in different States. As regards the cities (the term applied in America to any municipality), the scheme of government is usually as follows.

There is always a Mayor, the head of the executive, elected for one, two, or three years, receiving a substantial salary, and charged with the maintenance of order and general oversight of municipal affairs. There is always a legislature, consisting either of one or of two representative bodies elected for short terms, generally in wards, and (in most cases) receiving salaries. The other officials, including the police justices and local civil judges, are either elected by the people or appointed by the Mayor, with or without the concurrence of the Legislature. The tendency of late years has been to vest larger and larger powers in the Mayor. In some cities there is a distinct board of Police Commissioners (sometimes appointed by the State), and in most the management of the Public Schools is kept distinct from the rest of the municipal government and given to a separately elected School Committee.

As regards Rural Government, two systems may be distinguished, in the one of which the township, in the other the county, is the administrative unit.

The township, called in the New England States the Town, is a small district corresponding roughly to the Commune of France, or the Gemeinde of Germany. Its area is in the Western States usually 36 sq. M. and its average population from 500 to 2000. Its inhabitants choose annually a small number (usually six or seven) of officials, who manage all local affairs, roads, police, poor relief, and (in some States) sanitary matters, collect local taxes for these purposes, and also choose one or more local justices. In the New

England States and in most parts of the West the inhabitants are accustomed to meet at least once in spring, in some places several times a year, to receive the reports of their officers, vote the taxes, and pass resolutions upon any other business that may be brought before them. This gathering is called the Town Meeting. Schools are usually managed by a separate School Committee, but sometimes by the township officers.

Above the township stands the county, whose area averages (in the Western States) 5-600 sq. M. In the older States it is usually smaller. Its business is administered by a board of (usually) three to five persons, elected annually and receiving small salaries. The county has charge of prisons, lunatic asylums, main roads, and in some States of the alms-houses provided for relief of the poor. In other States this function is left to the townships, which administer a little out-door relief. Pauperism is not a serious evil except in the large cities; in most rural districts it scarcely exists.

This Township and County System prevails over all the Northern and Middle States and is on the whole purely and efficiently administered.

In the other parts of the Union, *i.e.* in all or nearly all of the former Slave States, there are no townships; the unit of government is the county, to whose yearly elected officers all local business whatever is intrusted. The Southern counties are generally somewhat larger but not more populous than those of the Northern States. Local government is altogether less developed and less perfectly vitalized in this part of the country, but within the last thirty years sensible progress has been made — least, of course, in the districts where the coloured population is largest, such as Louisiana, Mississippi, and South Carolina. Townships are beginning to appear in some States and the growth of education makes the School Districts and Committees an important factor in giving the people interest in local affairs.

The Americans are as a rule well satisfied with their system of rural local government, which in many respects might serve as a model to Europe, being more free and popular than that of Germany or France or Italy, more complete than that of England. With their municipal government on the other hand the liveliest discontent exists. The larger cities especially have in most cases fallen into the hands of unscrupulous gangs of adventurers, commonly known as Rings, who monopolize the offices and emoluments, job the contracts for public works, incur large debts for the city, and in some few cases enrich themselves by plundering the public funds, while occasionally securing impunity by placing their creatures and dependents in judicial posts.

Many attempts have been made to bring about reforms by changing the frame of municipal government, but so far no great success has been attained. The root of the evil seems to lie partly in the

presence in these great cities of a vast multitude of ignorant voters — mostly recent immigrants from Europe — who, since they pay little or no direct taxation, have no interest in economy; and partly in the indifference of the better class of citizens, who are apt to neglect the duty of voting at municipal elections, or when they do vote condone the faults of a Ring which professes to belong to their own political party. The smaller cities, down to those with a population of from 8000 to 10,000, present similar though less glaring faults; and on the whole it may be said that municipal government is the one conspicuous failure of American democracy.

Distribution of Powers between the States and the Federal Government. When the people of the United States created the Federal Government by the adoption of the Constitution, the States retained in their own hands all power, authority, and jurisdiction which was not delegated to the Federal Government. Accordingly the field of State action remains not only wide but undefined. It includes the maintenance of law and order within the State, control of the State militia and police, the organization of local government both urban and rural. The whole field of ordinary law as well civil as criminal, comprising the law of marriage and other family relations, of property and inheritance, of contracts and torts, of offences at common law or otherwise, is within the scope of State legislation. So also is the law relating to trade within the State, including the law of corporations and the regulation of railways and canals, as well as the control of education, charities, the care of the poor, and matters pertaining to religion. The State courts have of course a jurisdiction commensurate with the sphere of State legislation; *i.e.* they try all causes arising under State law and punish all offences against it. The State has also an unlimited power of taxing all persons and property (except as hereinafter mentioned) within its area, of borrowing money, and of applying its funds as it pleases.

The powers and jurisdiction of the Federal Government on the other hand are restricted, being those, and no others, which have been either expressly or by implication conferred upon it by the Federal Constitution. They therefore admit of being specified and are the following.

Control of the Conduct of War.
Relations with Foreign States.
Offences against International Law.
Army and Navy.
Commerce with other Countries and between the States.
Post Offices and Post Roads.
Patents and Copyright.
Duties of Custom and Excise.
Coinage and Currency; Weights and Measures.
Naturalization;

with the power of imposing and inflicting penalties for offences connected with the matters foregoing.

On all these subjects the Federal Legislature has the exclusive right of legislating, and the Federal Executive and Judiciary have, of course, the right and duty of enforcing such legislation. There are also a few subjects, including bankruptcy, which the Federal Legislature may deal with, but which, if left untouched by Federal

Statutes, State legislation may regulate. There was at one time a uniform Federal bankrupt law; at present there is none, and the matter is regulated by each State in its own way.

Besides this allotment and division of power, the Constitution imposes certain restrictions both on the Federal Government and on the State Governments. The former is disabled from suspending the writ of *habeas corpus* or passing an *ex post facto* law, from abridging the freedom of speech or of the press, or the right of bearing arms, from making certain changes in legal procedure, from giving any commercial preference to any particular State, from establishing or prohibiting any religion. Each State, on the other hand, is restrained from making any treaty or taking other international action; from coining money or making anything but gold or silver coin legal tender; passing any *ex post facto* law or law impairing the obligation of contracts; setting up any but a republican form of Government; maintaining slavery; denying the right of voting in respect of race, colour, or previous condition of servitude; abridging the privileges of a U. S. citizen or denying to any person within its jurisdiction the equal protection of the laws; depriving any person of life, liberty, or property without due process of law. Neither can any State, except with the consent of the Federal Legislature, impose any duty on exports or imports, or keep ships of war or troops (except its own militia) in time of peace.

Where there is a doubt as to whether a particular power is possessed by one or other authority, the legal presumption is in favour of its being possessed by a State, because the original States were all of them self-governing commonwealths with a general power over their citizens; while the legal presumption is against the Federal Government, because the powers it has received have been enumerated in the Federal Constitution. However it is not deemed necessary that these powers should have been all expressly mentioned. It is sufficient if they arise by necessary inference.

Structure of the Federal Government. The Federal Government consists of three departments or organs, which the Constitution has endeavoured to keep distinct: *viz.*, the Legislature, the Executive, and the Judiciary. The powers of these three extend over every part of the country alike, but of course touch those matters only which lie within the purview and competence of the Federal Government.

The Legislature. The Federal Legislature, called Congress, consists of two chambers — the Senate and the House of Representatives. The Senate is composed of two persons from each State: *i.e.*, at present of 92 persons, and is presided over by the Vice-President (salary, $12,000) of the United States. Senators are chosen in each State by the legislature thereof, a circumstance which has largely contributed to cause those bodies themselves to be elected on the lines of the great national parties. Each senator sits for six years, and one-third of the body go out of office every two years, being of course re-eligible. The

Senate, besides its legislative powers, which are equal to those of the House (except in one point, *viz.*: that Money Bills must originate in the House), has also two important executive powers. One of these is the right of approving or rejecting nominations to office made by the President, a right which is freely exercised except as regards Cabinet offices, which custom leaves entirely within the President's discretion. The other is the power of approving treaties, which must be submitted by the President to the Senate and are not valid until ratified by a majority of two-thirds of the Senators present. The Senate has also the judicial power of sitting as a High Court to try impeachments preferred by the House of Representatives against the President or any other of the great officials, including the Federal Judges. When the Senate sits in this capacity the Chief Justice of the United States presides. A majority of two-thirds is required for conviction. Andrew Johnson is the only President who has ever been impeached (1867), and in his case the requisite majority was not obtained.

The post of Senator, being dignified, powerful, and comparatively permanent, is much sought after and is indeed the chief object of ambition to successful members of Congress or pushing State politicians. It is these attractions rather than the method of indirect election by the State legislatures, which have drawn so much political ability into the Senate. At present many of the Senators are men of great wealth and some of them are accused of having made their way into it chiefly by their wealth, the State legislatures being not infrequently open to this kind of influence. It has often been proposed to vest the election directly in the people of each State, and probably this would be a better method than the present. Although the States differ vastly in size and importance, the Senators from the small States exert as much influence as those from the greatest, being indeed often superior in ability to the latter.

The House of Representatives consists at present of 391 persons elected by districts of nearly equal size, the boundaries of the districts being in each State determined by State legislation. The members are elected for two years, elections being always held in the November of a year bearing an even number; *e.g.* 1900, 1904, 1908. Members are almost invariably chosen from the district in which they reside. Like the Senators, they receive a salary of $ 7500 a year, besides mileage (travelling expenses). They are (especially in the North and West) less frequently re-elected than is the case with Senators; and it generally happens that about one-half of the members of each House have not sat in the preceding House. Usually more than half of the members belong to the legal profession, though many of these do not practise law. Although elected in November, a new House does not come into existence till the 4th March following and is seldom summoned by the President to meet until the December of the same year. The first function of a House is to choose its Speaker (salary, $ 12,000), who always belongs to the majority and is permitted to use

all the functions of the Chair in the interests of his party. Having a large control over the conduct of business and the function of nominating all the committees of the House and assigning to each its chairman, his power is very great. All bills are referred after second reading, which is given as a matter of course, to one of the standing committees, of which there are usually at least fifty, each of from 3 to 16 members, and if reported back by the committee is considered in committee of the whole House when time can be found for the purpose. As the number of bills brought into each Congress now reaches or exceeds twenty thousand, many are not reported back, and a great many more are never taken up, or if taken up are not completed, by the House. The chairmanships of the chief committees such as those on Ways and Means, Appropriations, Rivers and Harbours, Foreign Relations, and Judiciary, are important posts which carry great influence and are much desired by leading men. There are also a considerable number of select committees appointed from time to time to deal with special questions. (A similar system of Committees prevails in the Senate, where, however, the Committees are appointed not by the presiding officer but by the Senate itself.) The House has a power of closing its debates and coming to a division by voting the 'previous question', and uses this power freely. In the Senate no similar power exists. In each body the presence of one-half of the total number is required to make a quorum.

Both the Senate and the House have the power of holding secret sessions; and this power is frequently exercised by the former, especially when the confirmation of appointments is under consideration.

Although Congress attempts much, it accomplishes comparatively little. The opportunities for delaying business are manifold; there is little recognized leadership, and therefore many cross-currents; the two Houses often differ, throwing out or amending in material points one another's bills. In these conflicts the Senate more often prevails than the House does, because it is a smaller and on the whole a better organized body. There is little direct corruption in either House, but a good deal of demagogism and of what is called 'log-rolling', this form of evil being extended by the enormous number of bills relating to particular persons, places, or undertakings, which are promoted in the interests of private individuals and are pushed by the miscellaneous crowd of unrecognized agents called the 'Lobby'. In each House each of the great parties is in the habit of holding from time to time party meetings to determine its policy in the House, and the decisions of the majority at such meetings are deemed binding on the members and usually obeyed. This is called 'going into caucus'.

The Executive. The President of the United States is chosen by persons who are elected in each State for that purpose and that purpose only. In every State the voters (*i.e.* the same voters as those who elect members of Congress) elect on the Tuesday after the first Monday in November every fourth year a number of Presidential electors equal to

the total representation of the State in Congress (*i.e.* two Senators *plus* so many members of the House of Representatives). Thus New York has 39 Presidential Electors, Pennsylvania 34, Delaware and five other small States only three each. These Electors meet subsequently and vote for the President. Should no person voted for receive a majority of the votes of all the electors appointed, the choice of a President goes over to the House of Representatives, which elects by States, each State having one vote only, and an absolute majority being required. Although it was originally intended that the Presidential electors should be free to choose whatever person they thought best, it has long since become the rule that they shall vote for the candidate nominated by the party which has chosen them as electors; and they are in fact nothing more than a contrivance by which the people, that is, the party which commands a majority of votes, chooses the President. However, as the election takes place by States, and as even a very small popular majority in a particular state can throw the whole electoral vote of that State for one candidate, while in one or more other States a very large popular majority can do no more than throw the electoral vote of the State for the other candidate, it sometimes happens that the candidate who gets the majority of the electors' votes, and is therefore chosen, has not obtained a majority of the total popular votes cast. Another consequence of this device is that whereas the contest is always very keen in States where parties are equally balanced, it is quite languid where one party is known to have a majority, because the greater or smaller size of that majority makes no difference in the general result over the whole Union. The Presidential electors are now usually chosen by a popular vote all over each State, but they were at one time chosen by the State Legislatures, and also for a time, in many States, by districts. Michigan has recently reintroduced the district plan.

The President must be thirty-five years of age and a native citizen of the United States. He is legally re-eligible any number of times, but custom (dating from George Washington) has established the rule that he must not be re-elected more than once. He receives a salary of $75,000 (15,000*l.*).

The President's executive duties are of five kinds:

(a). He is commander-in-chief of the Army and Navy (and of State militia when in Federal service) and commissions all officers.

(b). He appoints all the chief and many minor officials, but the consent of the Senate is required, and is sometimes withheld, except to what are called Cabinet offices.

(c). He has a general supervision over the whole Federal administration and the duty of seeing that the (Federal) laws are duly executed. Should disorder arise anywhere which the State authorities are unable to suppress, they may invoke his aid to restore tranquillity.

(d). He conducts the foreign policy of the nation, and negotiates

treaties, which, however, require the approval of the Senate. The power of declaring war rests with Congress.

(e). He may recommend measures to Congress, and has the right, when a bill passed by Congress is sent to him, of returning it with his objections. If in both Houses of Congress it is again passed by a majority of two-thirds in each House, it becomes law notwithstanding his objections; if not, it is lost. This so-called Veto power has been largely exercised, especially by recent Presidents. Between 1884 and 1888 no fewer than 304 bills, most of them private or personal bills were vetoed, and very few were repassed over the veto.

The Administration or Cabinet consists at present of nine ministers, *viz.:* Secretary of State (who has the conduct of foreign affairs), Secretary of the Treasury (Finance Minister), Secretary of War. Attorney General (Minister of Federal justice as well as legal adviser), Secretary of the Navy, Postmaster General, Secretary of the Interior (with charge of Indian Affairs, of the management of the public lands, and of pensions), Secretary of Agriculture, Secretary of Commerce and Labour. None of these, nor any other officer of the Government, can sit in Congress. They are appointed and dismissible by the President, and are primarily responsible to him rather than to Congress, which can get rid of them only by impeachment, a process applicable rather to specific offences than to incompetence, and not applicable at all to mere divergence of policy from that which the majority of Congress desires. The Cabinet is therefore something quite different from what is called a cabinet in European countries. It does not relieve the President of responsibility; he may consult it as much or as little as he pleases, and he need not be guided by its advice.

The Federal Judiciary. There are four sets of Federal Courts:

(a). The District Courts, 85 in number, in which the District Judges sit, receiving salaries of $ 6000.

(b). The Circuit Courts, held in the nine judicial circuits, and served by the Circuit judges, now 29 in number (salary $ 7000), together with a judge of the Supreme Court, one such judge being allotted to each circuit.

(c). The Circuit Courts of Appeal, entertaining appeals from the District or Circuit Courts.

(d). The Supreme Court, consisting of a Chief Justice and eight puisne justices who sit at Washington and have original jurisdiction in cases affecting ambassadors, or where a State is a party to the suit. In other cases they are a Court of Appeal from inferior Federal Courts. The salary is $ 12,500 ($ 13,000 for the Chief Justice).

All these judges are appointed by the President with the consent of the Senate, and hold office for life, unless removed by impeachment. Only four have ever been impeached, and two of these were acquitted. A place on the Supreme Bench is much desired and prized; and the permanence of tenure secures a pretty high average

of knowledge and capacity, considering the smallness of the salaries paid also in the inferior Federal courts.

The jurisdiction of the Federal Courts extends over the whole Union, but is limited to certain classes of cases, civil and criminal, the most important whereof are the following.

Cases affecting ambassadors and other foreign ministers, cases of admiralty and maritime jurisdiction, controversies to which the United States shall be a party, controversies between States, or between citizens of different States, or between a State, or any of its citizens, and any foreign State or its subjects or citizens, cases arising under the Federal Constitution, or some law or treaty duly made by the Federal government. If, as frequently happens in the three last-mentioned sets of cases, the action has begun in a State Court, there is a full right to have it removed into a Federal Court, and this may be done even in an action which was supposed to involve questions of State Law only, if in the course of the proceedings some point of Federal Law arises. The result is to secure to the Federal Courts the cognizance not only of all international and inter-State questions, but also of all those which in any way depend upon Federal Legislation. Thus the arm of the National Government is extended over the whole Union, each Federal Court having an officer called the U.S. Marshal to execute its judgments, and being entitled to demand the aid of the local authorities in case of resistance.

There is nothing special or peculiar in the powers of the Supreme Court, or of the American Federal Courts generally; nor have they, as is sometimes supposed, a right to review and annul the acts either of Congress or of the State Legislatures. The importance of their functions arises from the fact that in the United States the Constitution is the supreme law of the land everywhere, so that if any Statute passed by Congress, or any Constitution enacted by a State, or any Statute passed by a State Legislature, conflicts with the Federal Constitution, such Statute or State Constitution is as a matter of law invalid and null, and must be treated as such by all persons concerned. The authorities whose function it is to ascertain and determine whether it does or does not conflict with the Federal Constitution are the Courts of Law; and as the Supreme Federal Court is the highest court of appeal in all questions involving the Federal Constitution, all important and difficult cases are carried to it and its decision is final. The Courts, and especially the Supreme Court, of each State exercise a similar function in cases where a State Statute is alleged to be in conflict with a State Constitution, the latter, of course, as being a law of higher degree, prevailing against the former. No court, however, pronounces upon the validity of a law unless in an action or other regular legal proceeding between parties, for the decision of which it becomes necessary to settle whether or no the law is valid. (In a few States, the Governor or the Legislature may consult the Supreme Court on constitutional

points, but the opinions so given by a Court are not deemed to be binding like a judgment in an action.) As in all questions of Federal Law the State Courts are bound to follow and apply the decisions of the Federal Courts, so also in all questions of State Law, when these come before a Federal Court, such Court ought to follow and apply the decisions of the highest court of the particular State in question. That is to say, the Federal Courts are not higher than the State Courts, but have a different sphere of action, nor are they, except as regards questions arising under the Federal Constitution, called to overrule decisions of the State Courts.

General Working of the Federal Government. The salient feature of the Federal or national Government is that it consists of three departments, each designed to work independently of the other two. Thus the Federal Executive, the President and his Ministers, are independent of Congress. The President is elected (indirectly) by the people, and cannot be displaced by Congress (except by impeachment). The Ministers are appointed by the President, and cannot be dismissed by Congress nor even restrained in their action, except in so far as legislation may operate to restrain them; and as Congress is debarred from intruding into certain administrative details, its legislation cannot reach these. The President cannot dissolve Congress, which is elected for a fixed period, and cannot check its legislation, if there is a majority of two-thirds against him in both Houses. The conduct of foreign affairs, however, and the making of appointments belong partly to him and partly to the Senate, so that in this sphere he and one branch of Congress are closely associated. The third department, the Judiciary, is independent of the other two, for though its members are appointed by the President with the consent of the Senate, they cannot be ejected from office except by impeachment. All these departments are deemed to derive their respective powers directly from the people, Congress and the President by election, the Judges from the Constitution which the people enacted and which it is their duty to interpret. Thus the principle of Popular Sovereignty is consistently carried out. That principle is, however, even more conspicuous in the State Governments, because in them not only are all the leading officials directly elected by the people, and (in the great majority of the States) the judges also, but also because the people constantly legislate directly (without the intervention of the State Legislatures) by enacting State constitutions or constitutional amendments. Although, however, in this aspect the Federal Government (and still more the State Governments) may appear to be very democratic, the following important restrictions have been provided to prevent sudden or violent change. (a) The Legislature, which is the strongest power, is divided into two coördinate and jealous houses. (b) The Legislature is further restrained by the veto of the President. (c) The Legislature is limited to certain subjects and disabled from certain kinds of action. (d) The President

is held in check by Congress, which can refuse money, and by the Senate in foreign affairs and appointments. (e) He has, moreover, only a very small standing army at his disposal.

Conjoint Working of the Federal and State Governments. Although the Federal Government is in constant action by its laws, its officials, and its judges over the territory included in the States, comparatively little friction arises between the two sets of authorities. As respects elections, all State elections are conducted under State laws, Federal elections to some extent under Federal laws, so far as these have prescribed certain rules, but chiefly under State laws, because Congress has left many points untouched. As regards finance, all direct taxation is imposed by the State Legislatures, while the Federal Government raises its revenue by duties of customs and excise. The chief difficulties which have been felt of late years are connected with the divergences of law between the different States, especially as regards marriage and divorce, and with the control of commerce and the organs of transportation, especially railroads. The Federal Government can legislate only with regard to trade between the States and to navigable waters within more than one State and railroads so far as they carry traffic between States. Many intricate problems have arisen as to the respective scope of Federal and State action on such matters; but these have, since the Civil War, been peaceably adjusted by the Courts as interpreters of the Constitution.

Extra-State Dominions of the United States. Washington, the capital of the Union, stands in a piece of ground comprising 69 sq. M. which has been set apart as the seat of Federal Government, and is governed by three Commissioners appointed by the President. It is called the Federal District of Columbia.

There are four *Territories* (Arizona, New Mexico, Alaska, and Hawaii). The Union is a union of States only, and these districts have not yet been admitted to the dignity of Statehood. Arizona and New Mexico each enjoy local self-government, having a legislature of two Houses which can pass statutes, subject, however, to the unrestricted authority of Congress to annul them and legislate directly. In each of these there is a Governor appointed by the President; and part of the law in force has been directly enacted by Congress.

Alaska (comp. p. 678) and Hawaii, though ranking nominally as Territories, are still directly governed by Federal officials (named by the President) and by statutes of Congress. Each Territory sends a delegate to the Federal House of Representatives, who is allowed to speak but not to vote.

The Philippine Islands and Porto Rico (p. 669) are dependencies, having their own legislatures, but with Governors appointed by the President, and upper chambers also consisting chiefly of nominated members.

Practical Working of the Government. The Party System. The character of the political institutions of the country has been so largely

affected by the political parties that a few words regarding their organization and methods are needed in order to understand the actual working of the Government.

Since the adoption of the Federal Constitution in 1788-89, the people of the United States have been, except for a few years (from about 1818 till 1826), pretty sharply divided into two parties. Occasionally, three or even four parties have appeared; these, however, have been short-lived. From 1789 till 1818 the two great parties were the Federalists and (Democratic) Republicans; the Federalists then disappeared, while from about 1830 till 1854 the Republicans, now called simply Democrats, were opposed by a party called Whigs. In 1856 a new party who took the name of Republicans came into being, carried the Presidential Election of 1860, and have continued until now contending with the Democrats. Minor present parties are the Prohibitionists and the Socialists, the latter sometimes divided into sections (comp. Section ix of Introd.). Both the two great parties have created and maintain themselves by exceedingly strong and well ordered organizations, existing over the whole country as a body of political machinery far more effective than has ever been seen elsewhere. The causes which have made such machinery necessary are chiefly these three.

Elections are very numerous, because all the chief State and City officials and all members of representative assemblies are chosen by the people and chosen for short terms. Even those official posts which are not directly conferred by popular vote, such as all the Federal offices, are usually held at the pleasure of the President or some other high official, who has for the last sixty years been accustomed to appoint members of his own party to them, dismissing those whom he finds on coming into power, if they belong to the opposite party. The desire to have or to retain these posts furnishes a strong personal motive for exertion on behalf of a party, because one's livelihood may depend upon it. Moreover the social equality which prevails generally in America prevents the masses from being disposed to follow men conspicuous by rank, wealth, or intelligence, and makes it necessary to have organizations in order to supply the absence of that spontaneous allegiance and natural grouping which do much to hold parties together socially in the free countries of the Old World. As there are in the United States comparatively few persons with sufficient leisure to devote themselves to political work from purely public motives, it has been thought necessary that this work should be done by those who have a pecuniary interest in the success of their party; and these persons, making such work their profession, have been able to carry this political machine to an unprecedented point of effectiveness.

In every local area which elects an official or a representative (such as a City Ward or a Rural Township) each of the two great parties has a local association which selects from the resident members

of the party a candidate to be run for every elective post or office at the next election. The meeting of the local members of the party which makes this selection is called a Primary Meeting. Where an election is to take place for a wider area (such as a Congressional district or a State Assembly district, or a City) the candidate is selected by a party meeting called a Convention, consisting of delegates from all of the primaries within that area. Where the election is that of the President of the United States, the party candidate is selected by a very large body called the National Nominating Convention, consisting of delegates chosen by Conventions held in the several States. The number of delegates to this greatest of all Conventions is double that of the number of Presidential electors plus two delegates from each Territory.

Very rarely does any candidate offer himself for election to any post unless he has been selected by a Primary or a Convention as the party candidate. Sometimes, however, in local elections (especially in cities) a third organization is created in view of a particular election or group of elections, which nominates what is called an 'Independent' or 'Citizens' candidate, outside the regular organizations of the two great parties. And when a third or fourth party (such as the Prohibitionists or the Socialists) exists, it establishes in that part of the country where it has substantial strength, an organization like that of the Democrats or the Republicans; and nominates its candidates in the same way. Great importance is attached to 'getting the nomination', because a large number of voters in each party are disposed (especially in great cities) to adhere to the candidate whom the organization has chosen, with comparatively little regard either to the precise shade of his opinions or to his intellectual capacity. Great pains are therefore bestowed on securing the nomination, and where there are two local factions within a party, the strife between them over the nomination is often more bitter than that between the hostile parties. Bribery, personation, and even physical violence have been sometimes resorted to in order to carry a nomination of delegates in a Primary or of candidates in a Nominating Convention; so that in many States it was deemed needful to pass laws for regulating these party meetings, securing the freedom of the voters, and preventing corruption or unfairness. So, also, when the control of the nomination for the Presidency lies between two prominent and popular party leaders, the Convention is a scene not only of active and protracted intrigue behind the scenes, but of passionate excitement during the voting.

This system of party machinery, and the habit which the voters have of supporting those candidates only whom the official machine nominates, have become one of the main causes of misgovernment in the largest cities. In those cities there is a large poor and comparatively ignorant multitude which, since it pays an exceedingly small part of the local taxation, has a very slight interest in economical and prudent administration. It falls easily under the dominion

of leaders belonging to its own class who care little for real political issues, but make their living out of the city offices and the opportunities of enrichment which such offices supply, and it votes blindly for the candidates whom those leaders, through their control of the organization, put forward as the 'regular party candidates'. These candidates are, of course, in league with the men who 'run the machine'; and when they obtain office, they reward their supporters by posts in their gift, sometimes also by securing for them impunity from punishment, for in the lower parts of some cities the nominating machinery has fallen into the grasp of cliques which, if not actually criminal, occasionally use criminals as their tools. Another source of the strength of these dangerous elements in politics has lain in the profuse use of money. Bribery has been not uncommon, both in City, State, Congressional, and Presidential elections. Efforts, however, which seem likely to be successful, have lately been made to repress it by the adoption in nearly all the States of laws creating a really secret ballot. Some States have also sought to limit election expenditure; and it may be said generally that the spirit of reform is actively at work upon all that relates to the election system. Intimidation is rare, except in the Southern States, where it is still occasionally, though much more rarely than thirty years ago, practised upon the negroes. Seeing that the great majority of the negro voters are illiterate and possessed of little political knowledge, white men otherwise friendly to the coloured people justify both this and the more frequent use of various tricks and devices as the only remedies against the evils which might follow the predominance of the coloured vote in those States, where the whites are in a minority.

As visitors from Europe, who usually spend most of their time in the great cities, are apt to overestimate these blemishes in the democratic institutions of the United States, it is well to observe that they are far from prevailing over the whole country, that they are not a necessary incident to democratic institutions but largely due to causes which may prove transitory, and that they do not prevent the government both of the Nation and of the States from being, on the whole, efficient and popular, conformable to the wishes of the people and sufficient for their needs. — There is no *Established Church* in the United States, nor is any preference given by the law of any State to any one religious body over any other body, although such was formerly the case in the older States, and might be now enacted, so far as the Federal Constitution is concerned, in any State. However all the States have, each for itself, pronounced in favour of absolute religious equality and embodied such a provision in their respective constitutions. When questions relating to the temporalities of any ecclesiastical body or person come before the courts of law, they are dealt with by the ordinary law like other questions of contract and property. Religious feeling seldom enters into political strife, and there is a general desire to prevent its intrusion either in Federal or in State matters.

XI. Aborigines and Aboriginal Remains,

by the late

Professor O. T. Mason

(revised by *Dr. W. Hough*).

The aboriginal history of the United States divides itself into two chapters, the *Archaeologic* and the *Ethnographic*. The former relates to a period about whose beginning there is much dispute and whose close shades into the latter imperceptibly. The ethnographic chapter opens with the romantic adventures of Ponce de León (p. 616) in Florida with the Timucua Indians and is not yet closed.†

I. Archæology. The archæologist from abroad will find in the United States no such imposing ruins as meet his eyes everywhere in the Old World. Not even with Mexico or Central America or Peru can the ruins scattered over the Federal Republic enter into competition. The same is true of the age of these relics. It has been both alleged and disputed with vehemence, and that by eminent authorities on both sides, that at Trenton (p. 157), Madisonville (see p. lxi) and Comerstown in Ohio, Little Falls in Minnesota (p. 438), Table Mountain in California, and elsewhere, palæolithic man, in remote glacial times, left traces of his existence. But the true remains of antiquity within the borders of the United States are the shell heaps, bone-heaps, and refuse-heaps; the ancient quarries, workshops, and mines; evidences of primitive agriculture; graves and cemeteries; mounds and earthworks; pueblos and cliff-dwellings; trails, reservoirs, and aqueducts; springs; caves; pictographs and sculptures; relics of ancient arts and industries; crania and skeletons belonging to vanished peoples. And these relate to a grade of culture upon which all advanced races once stood.

Shell Heaps, Bone Heaps, Refuse Heaps. Along the Atlantic Coast, up and down the great affluents of the Mississippi, on the shores of the Gulf of Mexico and of the Pacific Ocean, are vast accumulations of shells, left by former savage tribes. Mingled with the shells are bones of the dead and the apparatus which they used in their lifetimes. In each locality the mollusks whose remains are discovered were of those species which still abound in the region. The most celebrated shell-heaps are found along the New England shores, in the Chesapeake Bay, throughout Florida, in Mobile Harbour, on the Tennessee River, at Santa Barbara and San Francisco in California, and about the shallows in Washington State. Bone-heaps are found on the plains of Dakota and are the remains of ancient buffalo feasts. The refuse-heaps are all that is left on ancient Indian camp sites, and there is scarcely a town in the Union that is not near one or more of these old habitations of the past.

† See *Farrand*, in The American Nation, a History (N. Y.; 1904), for an excellent résumé of the preparation of America for the white race.

Quarries, Workshops, and Mines. The aborigines of the United States had no other industrial life than that which belongs to the stone age. They quarried quartz, quartzite, novaculite, jasper, argillite, steatite, catlinite, slate, mica, volcanic rocks, always at the best sources of the material. The quarrying was, of course, simply the opening of shallow pits and drifts, by means of the rudest tools of wood, antler, and bone; and in the exercise of the most rudimentary engineering. They blocked out the art product at the quarry, leaving millions of spalls and rejected pieces, which resemble somewhat the so-called palæolithic implements. They manufactured these substances by flaking, chipping, pecking, boring, sawing, and grinding, using as tools hammers, saws, drills, polishers, etc., of stone and other materials at hand. Copper abounded in the W. central states, the raw material coming from Keweenaw and Ontonagon counties, Michigan. This copper was not smelted, but treated as a stone. It was cold-hammered on stone anvils with stone hammers, ground into shape on sandstone, and finished after the manner of a stone implement. All the relics of the ancient Americans of this region are of the neolithic type, though the tourist will doubtless be told that this is not true and will be shown all sorts of marvellous things.

Primitive Agriculture. Not only are finished implements recovered that must have been used in rude tillage; but, in S. Michigan especially, garden beds or rows were discovered, where maize, pumpkins, beans, and other indigenous plants had been cultivated. In Arizona and New Mexico terrace gardens adjoin the sites of ancient ruined pueblos, and in the caves and cliff-dwellings maize ears, pumpkin, squash, and cotton seed, and beans are found.

Graves and Cemeteries. The best-known antiquities of the United States are the ancient cemeteries, the mounds, and the earthworks. It is difficult to discover an Indian grave to the E. of the Alleghenies or to the W. of the 100th meridian. Within those limits they occur everywhere. The disposal of the dead was different in all the families of tribes. Inhumation, desiccation, inurning, surface disposal, aërial sepulture, aquatic burial, cremation, all had their advocates and practitioners. The most celebrated cemeteries are at Madisonville (Ohio), near Nashville (p. 585), and near Santa Barbara (p. 527).

Mounds and Earthworks. The mound and earthwork region includes W. New York, N. W. Pennsylvania, W. Virginia, N. Carolina, S. Carolina, Georgia, Florida, Alabama, Mississippi, Arkansas, Tennessee, Kentucky, Ohio, Indiana, Illinois, Iowa, E. Missouri, S. Michigan, Wisconsin, and Dakota.

'Within this territory are the copper mines of Lake Superior, the salt mines of Illinois and Kentucky, the garden beds of Michigan, the pipestone quarry of Minnesota, the extensive potteries of Missouri, the stone graves of Illinois and Tennessee, the workshops, the stone cairns, the stone walls, the ancient roadways, and the old walled towns of Georgia, the hut rings of Arkansas, the shelter caves of Tennessee and Ohio, the mica mines in South Carolina, the quarries in Flint Ridge (Ohio); the ancient hearths

of Ohio, the bone beds and alabaster caves in Indiana, the shell-heaps of Florida, oil wells, and ancient mines and rock inscriptions'. [*Peet*, 'The Mound-Builders: their works and their relics' (Chicago; 1892).]

Both mounds and earthworks are, however, to be seen sparingly everywhere. The largest mounds in the United States are in Illinois, opposite St. Louis (p. 410), and no one should spend a day in that city without taking a trip across the great steel bridge and visiting the *Cahokia Mound* near E. St. Louis (p. 409). In the neighbourhood are over fifty others of enormous size. In the cemetery at Marietta (p. 356), and at Grave Creek, on the Ohio river, 12 M. below Wheeling (p. 352), may be seen mounds of great size. The most famous tumulus is the *Serpent Mound* in Ohio (p. 408).

To the E. of the Rocky Mountains the most interesting remains are the earthworks. And of these there are two sorts, those designed for defence and those erected for ceremonial purposes. The former are found on bluffs and tongues of land with precipitous sides. These natural forts are strengthened by ditch banks and stone heaps and gateways covered within and without by mounds. The latter, on the contrary, are in exposed plains. Their ditch banks are in circles and polygonal figures and the parts are arranged as for religious and social occasions.

Besides those already mentioned the following defensive and ceremonial works may be mentioned (all in Ohio): — the Great Mound, at Miamisburg; Fort Ancient (p. 403); the Newark Works; the Alligator Mound, near Granville; the Stone Fort, near Bourneville; the Fortified Hill in Butler Co.; the Liberty Township Works; and the Hopeton Works.

Pueblos and Cliff Dwellings. In the drainage-basin of the Colorado and the Rio Grande, within the boundaries of Colorado, Utah, New Mexico, Arizona, and the N.W. tier of Mexican states, are the pueblos and the cliff-dwellings. Twenty-one pueblos along the Rio Grande, between 34° 45′ and 36° 30′ N. lat., are still inhabited by two different stocks of Indians, the Tañoan and the Keresan. The Zuñi, residing near the W. border of New Mexico, on the 30th parallel, speak an independent language; and the Hopi, in N.E. Arizona (see p. 480), dwelling in seven towns or pueblos, belong to the Shoshonean linguistic stock. Besides these inhabited villages of stone and adobé, there are many hundreds in the territory just named that have long been tenantless, and most of them are in ruins. The largest of them and by far the most imposing ruin within the United States is the *Casa Grande* (p. 551). The material is adobé made into large blocks. Three buildings, one of them sufficiently preserved to show the original form, stand in great rectangular compounds. The largest collection of ruined pueblos in this region lies on the Salt River, near the town of Phœnix (p. 551). Pueblos of large size are found in the Chaco canyon, New Mexico. Pueblo Bonito, a ruin of this group, is semicircular and measures 500 ft. by 300 ft. In the canyon regions bordering and opening into the Colorado river channel, especially upon the San Juan and the Dolores and their tributaries, are to be found cliff-dwellings innumerable; they are less numerous on the

waters of the Verde, Salt, and Gila rivers. They are mainly the outgrowth of topographical features, which prevented the construction of the typical pueblos in the open air. They are divided in two classes by archæologists, the *Cliff Houses* proper, constructed of masonry and set under the overhangs of massive rock in the canyons; and the *Cavate Houses* excavated in cliffs of tufa. The more noteworthy cliff-houses are the Casa Blanca in Canyon de Chelly, Arizona (p. 480); the Cliff Palace and Spruce Tree House on the Mesa Verde, Colorado (p. 493); and the Casa Montezuma, on Beaver Creek, Arizona. Cavate houses occur in thousands along the E. side of the Jemez plateau, upper Rio Grande, and others are found on the Rio Verde, Arizona. Somewhat distinct from these are the rude habitations excavated in scoria masses near Flagstaff, Arizona. Many of these cliff and cavate habitations are high up and difficult of access, but they overlook long valleys of arable land. Many *Shrines* have been noted in proximity to Pueblo ruins. Others exist among rocks and on mountain tops and contain offerings of turquoise and shell beads, pottery, etc. The relics found in this region are the envy of collectors. The Pueblos still manufacture pottery, but the ancient is far superior in quality to the new. Large collections are in the Eastern Museums, especially the National Museum.

Trails, Reservoirs, and Aqueducts. For the purposes of war and trade the savages traversed the United States from end to end. They had no beasts of burden save the dog, consequently they made portages from stream to stream, carried their canoes and loads across on their backs, and then pursued their journey. The traces of these ancient paths of primitive commerce may yet be seen. In the same rude manner these savages had learned to store up and conduct water for home use and for irrigation. Especially in the South West are the works of this class to be studied.

Springs. On account of the veneration of water sacred springs are numerous in the Pueblo region. Offerings of miniature pottery, flint implements, and in a few cases wooden objects and bones have been taken from them. The more noted are Montezuma Well, south of Flagstaff, and Gallo Spring, in Socorro County, New Mexico.

Caves. Inhabitation of caves never extended beyond the zone of light; this is true also of the deeper recesses where cliff-dwellings were erected. Deep caves were almost invariably depositories of offerings to the supernatural beings. In the limbo behind the cliff-dwellings discarded effects and house rejecta were thrown, and in this mass burials were made. The greatest ceremonial cave, having a floor area of over 10,000 sq. ft., is on Blue River, Graham County, Arizona. The exploitation of caves in this region for guano has brought to light vast quantities of offerings.

Pictographs and Sculptures. The very ancient people and their modern representatives had attained to that form of writing called

pictographic. The traveller will see in museums all sorts of figures scratched on bark, painted on skin or wood, etched on bone or ivory, engraved on pieces of stone, and he will often come upon the same designs sketched on cliffs and boulders. These constitute the written language of the aborigines. In true sculpture the latter were not at all adept and they had no alphabetic writing. Once in a while mysterious bits of stone are found with Cypriote or other characters thereon, but they never belonged to the civilization of this continent. Among the numerous pictographs are the extensive gallery near one of the Petrified Forests of Arizona (p. 480) and that in the lower canyon of the Tularosa River, New Mexico. They occur in greater frequency in the South West and are not records having connected significance, but are rather evidence of an exuberance of artistic instinct. The stone lions of Cochiti, New Mexico, are remarkable Pueblo sculptures.

Relics of Ancient Arts and Industries. As before mentioned the native tribes were in the neolithic stone age. Therefore, it is no exaggeration to say that the whole surface of the United States was strewn with relics. In every ancient grave, mound, or ruin they abound. The tourist will have no trouble in finding in every town a museum containing these objects and in every hamlet some one whose house is packed with them. So desirable are they that thousands are fraudulently made and palmed off upon the unwary.

Crania and Skeletons. Much difficulty has been encountered by archæologists in distinguishing the crania of the truly prehistoric American from those of the Indians encountered by the early explorers. The problem is further embarrassed by artificial deformations and by changes produced by the pressure of the soil. Excellent collections exist in Cambridge, Philadelphia, Washington, Cincinnati, and St. Louis.

Ethnography. The native tribes that once covered the entire domain of the Union belonged to fifty independent linguistic stocks. Some of these were spread over vast areas, for example, the Algonkian, Athapascan, Iroquoian, Muskhogean, Shoshonean, and Siouan. But a wonderful change has taken place in two centuries. Excepting a few small settlements here and there, the Indians are gone from the Atlantic States. Only the Cherokees in North Carolina, the Seminoles in Florida, the Iroquois in New York, and the Chippewa tribes about Lake Superior remain to the E. of the Mississippi river. The aboriginal title gave way to the title of discovery, and the feeble Indian title of occupancy has been swept away by the tide of European immigration.

There are at present, as regards title and legal status, several kinds of Indians in the Union.

1. Citizen Indians. The State of Massachusetts and the United States in certain cases have conferred upon Indians the full rights of citizenship.

2. In a few states, notably New York, reservations are granted to Indians and they are protected in their tribal rights therein.

3. Roving Indians are still at large in greater or smaller bands, especially in the Rocky Mountain region.

4. In acquiring its S.W. territory from Mexico the United States inherited three kinds of Indians: the Pueblo Indians, the Mission Indians, and the wild tribes. The status of these is most confusing.

5. But the great mass of Indians in the Union are in some sort of relation to the United States and hold their lands (1) by Executive Order, (2) by Treaty or by Act of Congress, (3) by Patent to the tribe, (4) by Patent to individuals.

For the relinquishment of their ancient homes the United States has also entered into agreements to pay to the tribes certain annuities in money and goods. Under these circumstances there are some of them who are the richest communities in the world. In the Osage tribe every man, woman, and child is worth $ 1500. The New York Iroquois preserve their autonomy and make their own laws, but also have a government agent. Many thousand Indians have their lands 'allotted' and thus have lately become citizens, the title to the land being inalienable for 25 years.

XII. Physiography of North America,

by the late

Professor N. S. Shaler

(revised by *Professor T. A. Jaggar Jr.*).

Although the traveller in North America may be most interested in the people or their social and material accomplishments, he will find it desirable at the outset of his journey to consider the physical conditions of the land, the nature of the climate, soil, and under earth: circumstances which have gone far to determine the history and development of the people who have come to the country from the old world.

The continent of North America is in many ways sharply contrasted with that of Europe. The last-named land consists mainly of great peninsulas and islands, which are geological dependencies of the great Asiatic field. It is, indeed, a mere fringe of the great Eurasian continent. North America, on the other hand, is distinctly separate from other areas, with a relatively undiversified shore, and with an interior country less divided than Europe by distinct geographic features, such as seas or mountain-chains. This geographic unity of the N. part of the New World is due, as is the case with all its other conspicuous features, to the geologic history of the country; it will therefore be well to preface the account of its detailed features by a very brief description of the steps by which its development was brought about.

In the Archæan age, the earliest epoch which geologists can trace in the history of the earth, the continent of North America appears to have consisted of a land mass outlined somewhat as at present but with extensions lying in the neighbouring seas beyond the present limits of the land, the positions of which are not clearly known. There were inland seas and archipelagos and, in Algonkian

time, great masses of sandstone, mudstone, and limestone with accompanying volcanic outpourings laid down in various places. At the beginning of the Cambrian period we find a continent much like the present one in outline with embayments like the gulfs of Mexico and California, gradually extending northward to receive sediments along troughlike depressions where the Cordilleran and Appalachian mountain ranges now are.

Gradually the interior of the continent subsided and from the débris of the ancient lands which lay to the East and to the West, together with the deposits of organic remains accumulated in a broad Mediterranean sea, strata of Ordovician, Silurian, and Devonian ages were formed. They extended far and wide over the area occupied by the great plains and the Mississippi Valley. These in turn were partly uplifted to make dry land, and yet other marine accumulations, formed in the then shallow seas, afforded the beginning of the Carboniferous strata. From time to time the more deeply buried rocks of the Appalachian and Cordilleran troughs had been warped and somewhat folded during these ages. The slow uprising of the land soon brought the continent to a state where there were very extensive low-lying plains forming a large part of what is now the Mississippi Valley, as well as the field now occupied by the Allegheny Mts., which then had been only slightly elevated, and other such plains fringed the E. coast of the Appalachian continent. On these plains there developed extensive bogs, which from time to time were depressed beneath the level of the sea and buried beneath accumulations of mud and sand. These afforded the beginning of the coal beds which constitute so important a feature in the economic resources of the country.

After the close of the great coal-making time, the Appalachian mountains were made by uplift and erosion, and similar mountain ranges of the Cordillera were formed on the western side of the continent. About this period the new red sandstone, or Trias, was deposited on river flats, deserts, and lagoons on the eastern side of the continent, while considerable areas west and south were still invaded by shallow Mediterranean seas. There was, however, a widespread drying up of these seas in many places, which produced gypsum rocks; and perhaps the continent at this time was as nearly coextensive with the present North American continent as at any time in its history. In Jurassic and Cretaceous times there came about new invasions of the sea from North and West as well as from the direction of the Gulf of Mexico, and vast marine deposits were laid down over the area now known as the Great Plains of the West.

The Tertiary period, the last great section of geologic time preceding the present age, was inaugurated by an uplift accompanied by volcanic outpourings which first gave definition to the Rocky Mountains. Great lakes were formed in many places, and elsewhere over the upraised sea-bottom of the Great Plains region rivers spread

their deposits. The lowlands of the Gulf states and of the Atlantic coast to the S. of New York rose and sank before the waters of the Atlantic in slow oscillations, so that broad deposits which we now find there are variously of fresh water or marine origin. In the closing stages of this Tertiary time there came the glacial period, during which a number of ice sheets, now practically limited to Greenland and Alaska, were extended so as to cover nearly one-half of the continent, the margin of the snowy fields being for a time carried as far S. as the Potomac and the borders of the Ohio River at Cincinnati, mantling the region to the N. with an icy covering having a depth of several thousand feet At this stage of the geological history, the N. portion of the land under the ice was deeply depressed relatively to the S. portion as we know it to-day. One of the extraordinary creations of the ice was the formation of what are known as the Great Lakes, which lie on the border between Canada and the United States. These were at first immense bodies of water lying between the receding ice front and the higher land to the South. At one later stage in their history the sea formed a strait between New York Harbour and the Gulf of St. Lawrence, along the Champlain valley, and with the recession that land was slowly lifted to its present position. Only in what we may term the present day has the continent quite recovered from the singular disturbance of its physical and vita conditions which the ice time brought about.

One of the most important results of the geological history of North America has been the development of this continent to a point where its surface is characterized by certain broad and simple topographic features. It is, indeed, on many accounts, a simple representative type of the greater land-masses. The eastern and western shores are bordered by tolerably continuous mountain ranges: those facing the Atlantic extend, though with various interruptions, from Greenland to Alabama; those next the Pacific from the peninsula of Alaska to Central America. South of the Rio Grande the Cordilleras form the attenuated mass of the continent in which lie Mexico and the states of Central America. Between these mountain ranges and the neighbouring oceans there is a relatively narrow belt of plains or low-lying valleys. The principal continental area, however, lies between these mountain systems in the form of a great trough. The southern half of this basin constitutes the great valley of the Mississippi. Its northern portion is possessed by various river systems draining into the Arctic and Atlantic Oceans, of which the Mackenzie and the St. Lawrence are the most important. The last named river system is peculiar in the fact that it is the greatest stream in the world which is fed mainly from lakes.

If we could contrast this over-brief story of the geological development of North America with a similar account of the leading events which have taken place in Europe, we should readily note the fact that the former land has had a relatively simple history. Fewer

mountain systems have been developed upon it, and consequently its shores lack the great peninsulas and islands which are so characteristic a feature in the old world. To this same architectural simplicity we may attribute the generally uniform character exhibited by the interior portions of the continent.

The conditions of the ancient history of North America have served to provide its fields with an abundant and precious store of the materials which fit its lands to be the seats of a varied and complicated economic life. Of these underground resources we can only note the more important. First among them we may reckon the stores of burnable material: — coals, petroleum, and rock or natural gas, substances which in our modern conditions have come to be of the greatest consequence to mankind.

The *Coal Deposits* of North America are on the whole more extensive, afford a greater variety of fuel, and are better placed for economic use than are the similar deposits of any other continent except perhaps Asia, the resources of which are still unknown. They range in quality from the soft, rather woody, imperfectly formed coals known as lignites, to beds which afford the hardest anthracites, coals so far changed from their original condition that they burn without flame much in the manner of charcoal. The greatest coal fields lie in the region to the E. of the Mississippi, but immense deposits of lignite and low grade coal have been discovered between the Mississippi and the Pacific Ocean, and Alaska promises to be a very rich coal field. The excellent coals of the eastern country were generally formed during the Carboniferous age; the lower grade fuel of the West was almost altogether accumulated in the Cretaceous and Tertiary periods. The age of the Alaskan coal is probably largely Cretaceous.

The *Petroleum* of North America occupies a larger portion of the country and affords a more ample supply of the material than those of any other land save the region about the shores of the Caspian Sea, known as the Baku district. The best of the American wells are in the Ohio valley, California, Texas, Oklahoma, and Louisiana. These deposits lie in strata from Silurian to Cretaceous, where they were probably formed by slow chemical change of the fossil remnants of ancient plant and animal life. The abundance of these accumulations of petroleum in North America is largely due to the fact that the beds in which the fluid has been formed lie in horizontal attitudes, in a position where the fluid has been retained by the unbroken strata, notwithstanding the great pressure of the rock gases which tend to drive it forth to the surface. Hence the simplicity above mentioned of the interior structure of the continent has had much to do with the preservation of this product.

The *Natural* or *Rock Gases* which of late years have played an important part in the industries of this country, serving for fuel and for illuminating purposes alike, owe their origin and preservation to conditions similar to those which have brought about the accumu-

lation of petroleum. These substances, though the one is liquid and the other gaseous in form, are chemically akin, and are indeed only varied results of the same natural actions. They are both alike often formed in rocks where the strata abound in fossils. The reason why these materials do not often occur in Europe is probably due to the fact that the strata of that country have been so much ruptured and tilted by the mountain-building forces, which have affected almost every part of that country, that oil and gas have alike escaped to the surface of the earth by passages which these dislocating actions have provided for them. In North America on the other hand, where vast areas of strata still lie in substantially the same position in which they were formed, the substances have been to a great extent retained in the rocks where they were produced.

The store of rock gases and of petroleum known to exist in this country will probably be exhausted sooner than will the coal, but estimates which set a definite limit to their production are not believed to be based upon reliable data. The fuel in the form of coal exists in such quantity that there is no reason to apprehend a serious diminution of the store for some centuries. This statement is based upon a careful estimate made recently by a statistical expert of the United States Geological Survey.

Next in importance after the fuels of North America, we may rank the ores from which *Iron* can be manufactured. These exist in great quantities in almost every important district of the continent, and at many points they are very advantageously placed in relation to supplies of fuel and to the transportation routes. The largest and the richest mines lie in the district of Lake Superior, while iron ores of earlier development and still large producers occur in the district of the Appalachian Mountains between the Potomac River and Southern Alabama. In this field the ores have the general character of those which have afforded the basis of the great industry in Great Britain; as in that country, these Appalachian deposits are very favourably placed in relation to coke-making coal with which they are to be smelted. The other conditions for the development of the great industry are in this district also very favourable. so that this field is likely to continue to be an important one for iron production in spite of the extraordinary development of its rival in the region of the Great Lakes.

The most important deposits of iron ore in North America lie in the region about the head of Lake Superior. In this field the deposits are of a very high grade and with the rapid development of transportation and improvement of processes on a large scale, it has become possible to mine them very profitably in spite of their distance from the region of coking coal in Pennsylvania and Kentucky. Immense quantities of these ores are transported for reduction to the coal district about the headwaters of the Ohio River. The Cordilleran district abounds in iron ores. but as these western iron ores

are rarely near coals fit for use in furnaces, they cannot be regarded as of great economic importance at present, though it is probable that the future development of western coal lands will carry with it a great growth in the iron industry. The ores of North America afford the basis for an iron manufacturing industry which has already surpassed that of Great Britain, and at its present rapid rate of growth gives promise of soon exceeding that of all European countries.

The *Copper Deposits* of North America are to be ranked as next in importance to those which afford iron. Ores of this nature are extensively diffused in the older rocks of this country, but it is only in N. Michigan, in the Cordilleras and in Alaska that they have been proved to have great economic value. In the Michigan district they occur in a metallic form, and in such abundance that, notwithstanding the very high price of labour in that region, the product of the mine goes to the world's markets under conditions which enable the establishments to compete with the production of any other country. In the Cordilleras of North America the metal occurs, as is usual in other lands, in the form of ordinary sulphide veins, but the deposits are of such great extent and richness that they have proved very profitable, notably in Montana, Arizona, and Northern Mexico.

The mines producing *Zinc* and *Lead* are now chiefly limited to Missouri and the Cordilleran belt, though the former metal is still produced in large quantities from mines in New Jersey. A large part of the lead which now enters the markets of this country is obtained from the silver ores of the Rocky Mountain district, and as it is won as a by-product, it is produced at a low cost.

The *Gold* and *Silver Fields* of North America, which have considerable economic value, are largely limited to the mountainous district in the W. part of the continent. The S. portion of the Appalachian system afforded in the early part of this century, with the cheap slave-labour of the country, profitable mines of gold, but efforts to work the deposits since the close of the Civil War have proved unprofitable. There are a few successful gold mines in Nova Scotia. The evidence goes to show that the Cordilleran region alone is to be looked to for large supplies of the precious metals. Immense quantities of gold have been taken from river and beach placer mines in Alaska during the last decade, and other important discoveries of rich ore have been made in the desert regions of Nevada.

Various other metalliferous ores exist in North America and play a subordinate part in its mining industry. *Tin* occurs at many points, but it has so far proved unprofitable to work the deposits, the main reason for the failure being the cost of labour involved in the work of production. Doubtless the most important of these less valued elements of mineral resources which the continent of North America affords is the group of fertilizing materials which of late years have come to play so important a part in the agriculture of this and other countries. The *Phosphate Deposits* of the S.E. part of the United

States, particularly those of South Carolina and Florida, are now the basis of a large industry.

The soils of North America have, as the agricultural history of the country shows, a prevailingly fertile nature. In the region to the E. of the Mississippi within the limits of the United States over 95 per cent of the area affords conditions favourable for tillage. This region of maximum fertility extends over a portion of the area to the W. of the great river, but from about the 100th meridian to near the shores of the Pacific the rainfall is prevailingly insufficient for the needs of the farm. Crops can in general only be assured by a process of artificial watering, and the whole of the great Cordilleran field within the limits of the United States, and a large portion of that area in the republic of Mexico, a district amounting to near one-third of the continent, which would otherwise be fit for agriculture, is rendered sterile by the scanty rainfall. On this account the continent has as a whole less arable land in proportion to its size than Europe; moreover, more than one-fifth of its fields lie so far to the N. that they are not suited for agriculture; thus not more than three-fifths of the continent is naturally suited for husbandry. It should be noted, however, that the fields richest in metals lie in the arid districts, and that in this part of the realm there are areas aggregating more than 50,000 sq. M. which can by irrigation be made exceedingly productive and will afford a wide range of crops. Storage reservoirs for irrigation are now being built by the U. S. Government in many places.

The climate of North America is prevailingly much more variable than that of Europe. Between the arctic regions and the warm district of the tropics, there are no mountain barriers, and the land is so unbroken by true seas that the winter winds are not tempered or obstructed in their movement. The result is that the summer heat, even as far N. as the northernmost cultivated districts of Canada, is great and commonly enduring, while the winter's cold occasionally penetrates to the borders of the Gulf of Mexico, even S. Florida being liable to frosts of sufficient severity to destroy the more sensitive tropical plants. The only portion of the United States which has tolerably equable atmospheric conditions, is the coast belt of the Pacific from San Francisco to the S. This region has a climate in many ways resembling that of N. Africa.

The peculiarities of surface and of climate which result therefrom give rise in North America to certain classes of storms which are little known in any other land. In the region of the Cordilleras great whirling movements of the air arise in places where the barometer is low, which move with considerable speed to the E. across the country. Passing beyond the Atlantic coast-line, these great circular storms, which generally have a diameter of several hundred miles, continue their way over the ocean, and often after a due time appear on the coast of Europe. In the landward part of their journey these storms rarely have such severity as to damage property.

It often happens, however, especially during the spring season, that on the S.E. face of these advancing cyclones, small but very intense whirlings of the air are produced, which are known as tornadoes. These accidents often give rise to winds of singular intensity, movements of the air so energetic that they may disrupt the stoutest buildings, throw railway trains from the track, and by the upward rush of the atmosphere in their centres lift the bodies of men and animals to the height of hundreds of feet above the earth. Fortunately the paths of these tornadoes, or hurricanes, as they are locally called, are relatively very narrow, and the distance to which they course in their N.E. movement is short. The breadth of their destructive path rarely exceeds half-a-mile, and the distance to which the destruction is carried is generally less than twenty miles. Although occasional visitations of this nature have been experienced throughout all the United States to the E. of the Rocky Mountains, the district in which they are really to be apprehended and where they are likely to prove in a considerable measure destructive to life and property, appears to be limited to the N. and central parts of the Mississippi Valley, and the basin of the Ohio River north of Central Kentucky.

The waters of the Gulf of Mexico and of the neighbouring Caribbean Sea, as well as the shores of the mainland and islands of that district, constitute a field where another class of air-whirlings, the marine cyclones, also termed hurricanes, are frequently developed. These storms are much more enduring and more powerful than those formed upon the land; they often march from the regions where they are developed slowly up the Atlantic coast of the United States until they gradually penetrate to a region of the sea where the air next the surface is so cool that they no longer receive the impulse which led to their development. These marine cyclones find their parallel in similar atmospheric convulsions which affect the Indian Ocean and the China Seas. In both realms the disturbance of the atmosphere is due to the heated condition of the air next the surface of the ocean, and its consequent upward movement into the upper parts of the air. The whirling movement is the simple consequence of this ascent of the air through a narrow channel. It finds its likeness in the whirling imparted to the water in a wash-basin when it flows through the opening in the bottom of the vessel.

Another class of atmospheric actions in a measure peculiar to North America is found in the 'Cloud Bursts', or sudden torrential rains, which occasionally occur in the E. portion of the Cordilleras. In these accidents, though the region is on the whole arid, the rain occasionally falls over an area of limited extent with such rapidity that the air becomes almost unbreathable, and dry stream beds are in a few minutes converted into raging torrents. Although in their characteristic intensity these cloud bursts are limited to certain parts of the W. mountain district, a conspicuously rapid precipitation occasionally occurs in the more E. portion of the United States.

In its original state, that in which it was found by the first Europeans who landed on its shores, the E. part of North America was the seat of the greatest forest of broad-leaved trees, intermingled with pines and firs, which the world afforded. Although this noble Appalachian forest has suffered much from axe and fire, it still in part remains in its primæval state, forming a broad fringe of arboreal vegetation from the Gulf of St. Lawrence to Central Texas, extending inland to the central portion of the Ohio Valley and up the Mississippi to near its confluence with the Ohio and Missouri Rivers. To the N. and W. of this great woodland lay a region of generally treeless plains. The district of the Cordilleras was scantily forested, and along the Pacific Coast and on the W. slope of the Sierra Nevada, from Central California to the N., extended noble forests of narrow-leaf trees. Across the N. part of the continent the heavy growth of timber, somewhat stunted by the severity of the climate, extended from the Pacific to the Atlantic shores. As a whole the continent bore an ampler mantle of forest growth than any part of the old world beyond the limits of the tropics.

The traveller who for the first time visits North America should take care not to hamper his vision by preconceptions as to the beauty of natural scenery based upon the physiography of the old world As a whole the aspect of the N. continent of the new world differs greatly from that of the old. In the former land there are none of those admirable combinations of snow-clad mountains and fertile valleys which lend such a charm to the scenery of Switzerland In general the surface lacks those elements of detail which contribute so much to the picturesque aspect of a landscape. The scenery of North America is generally characterized by a largeness of mould and simplicity of outline dependent on the relatively uncomplicated nature of its geological history. The plains are vast and but little varied by elevations. The mountains of the Appalachian district have a singular continuity in their ridges, which, though it gives them a certain architectural beauty, deprives them of detail. The grander elevations of the Cordilleras, though attaining to about the altitude of the Alps, rise from a much more elevated base than the Swiss mountains, and therefore make a less striking impression upon the eye. At few points on the continent do mountains or even considerable hills come near to the coast, and the result is that the shore line has a monotony of aspect which is much contrasted with the sea margin of Europe.

The lovers of picturesque beauty in nature may well seek in North America the charm of its primæval forests, the beauty of its great plains when they bear their spring-time flowers, and the attractions which are presented by the greater rivers with their noble valleys and often marvellous gorges. Of these canyons or defiles cut by the streams, those of the Cordilleras are by far the greatest in the world. That of the Colorado and that of the Yosemite, each in its way eminently peculiar, and differing one from the other in origin and in aspect, are doubtless the most striking features of the continent, for they are unequalled in any other land.

The history of the aborigines in North America shows that this continent was only moderately well fitted for the nurture of races in their steps of passage from the primitive condition of man towards the ways of civilization. Though a remarkably fertile region, and abounding in game, the land contains none of those fortunate peninsulas, or districts walled about by mountains or the sea, which in the old world have afforded such admirable cradle-places for infant states. Thus it came to pass that in this country any tribe which attained some advance in civilization and became worth plundering was subjected to unending incursions from the neighbouring more savage folk. Only in Mexico and Central America did any

of the primitive tribes advance beyond the stages of barbarism. The better fortune of those countries was probably due in the main to their more secluded positions. Moreover in North America the primitive people found no animals which were well suited for domestication or could render much help to man. The only beast which gave much promise of such aid, the bison, though a domesticable animal, has proved on the whole intractable and unfit for the uses of man.

The united conditions of the continent which made it on the whole unsuited for the nurture of peoples in the first stages of their advance has been an advantage to the European folk who have been transplanted to this part of the new world. The simple geographic character of the country has made access to its different parts relatively easy, and brought about its subjugation to the uses of man with marvellous rapidity. Some have feared that owing to the lack of diversities in the conditions of the continent, the people developed upon it would have an excessive uniformity in character and quality. The history of the populations, however, seems to show that the variety in climate, in soil or under earth products, and in the occupations which these features require of people, are sufficient to ensure considerable difference in the folk developed in different sections of the land. Under the mask of a common language, which, though varied by provincial peculiarities, is a perfect means of communication among the greater part of the folk to the N. of Mexico, the acute observer will detect varieties in essential quality quite as great as those which separate the people who dwell in different parts of Great Britain, France, or Germany. Though in some part these peculiarities may have been due to the diverse origin of the folk, they are in the main to be attributed to the effects of the local conditions of climate and occupations.

It is evident that the climates of North America, except those parts which have a subtropical character and the regions of the Far North which are too cold for tillage, are admirably suited to the uses of the European peoples from the states in the N. part of that continent. The descendants of the colonies from England, France, and Germany planted on this soil more than two centures ago between Florida and Labrador have all greatly prospered. They have increased in numbers at a more rapid rate than their kindred of the old world, their average life is as great if not greater, and their endurance of labour of all kinds is in no wise diminished. The history of the Civil War shows that in the essential qualities these men of the new world have lost nothing of their primitive strength.

Fortunately for the transplanted population of America, the conditions of soil, climate, and earth-resources permit the people to continue on the ways of advancement in the occupations of life which were trodden by their forefathers in the old world. The agriculture and the mechanic arts required no change whatever on the part of the immigrants; the nature of the country seemed to welcome them to the new-found shores.

XIII. Climate and Climatic Resorts of the United States,

by the late

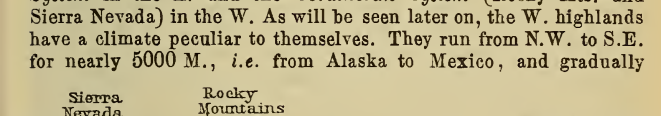
Edmund Charles Wendt, M. D., of New York.

Without some knowledge of the physical geography and topography of a country, an intelligent appreciation of its climatic peculiarities is not possible. This is particularly well seen in relation to the climatology of the United States. Extending from well-nigh arctic to almost subtropical regions, and from the level of the sea to elevations of nearly 15,000 ft.; covering a vast expanse of partly arid inland territory, and showing an enormous coast-line laved by two great oceans, it should not be surprising that every conceivable variety of climate may be found within its borders.

As compared with Europe, perhaps the most noteworthy feature of the American climate consists in its greater range of temperature and comparative dryness. The E. is also strikingly colder than the W. coast as well as the European countries of corresponding latitudes. This circumstance has led to much confusion, and has given the United States an undeserved reputation of being everywhere colder than Europe. It is quite true that, if New York, for example, be compared to cities of the same latitude, like Naples, Madrid, and Constantinople, or if Boston be contrasted with Rome, the American towns will be found decidedly colder. On the other hand if cities on the W. coast, like San Francisco or Portland, be selected for comparison, only trifling differences will appear.

Variations of Temperature. The mean annual temperature varies to the extent of over 40° Fahr. in different parts of the Union. Extremes of actually recorded temperatures extend from -56° Fahr. to 121° Fahr. in the shade, a range of 177°. Taking the mean temperature of July as representing the hot season, we find in different sections of the country variations of more than 30° — *viz.* from 60° to over 90° Fahr. Again taking Jan. as a representative cold month, we find a range of over 50° — *viz.* from 10° Fahr. to above 60°. Now it must not be forgotten that in the United States, perhaps more than elsewhere, temperature and climate are not merely questions of so many degrees of latitude. The lines for similar annual means (isothermal lines) are considerably modified by ocean currents and winds, besides being deflected by the interposition of lofty mountain-chains.

The Mountain Ranges. The two main ranges are the *Appalachian System* in the E. and the *Cordilleran System* (Rocky Mts. and Sierra Nevada) in the W. As will be seen later on, the W. highlands have a climate peculiar to themselves. They run from N.W. to S.E. for nearly 5000 M., *i.e.* from Alaska to Mexico, and gradually



slope to the E., so as to fill in from one-third to one-half of the N. American continent. The E. or Appalachian system extends in a S.W. direction from Nova Scotia to Alabama, a distance of over 1500 M. Its width averages hardly one-fifth, and the elevation of its peaks and plateaux not one-half that of the W. highlands. Hence its effect on local climate is much less pronounced (Guyot). Between these great mountain ranges the vast *Mississippi Basin* stretches out for thousands of miles, from truly arctic regions to the warm waters of the Gulf of Mexico. This basin also includes the Great Lake district, one of the prominent features of the N. states. The climate of this region is controlled by the vast expanse of these veritable 'inland oceans'.

Three Main Climatic Divisions. In accordance with the brief description just given, we recognize three main climatic divisions in the United States.

1. An *Eastern Region*, extending from the foot of the Rocky Mts. to the Atlantic seaboard, and including the entire Appalachian system.

2. The *Plateau and Mountain Region of the Western Highlands.*

3. The *Pacific Slope*, to the W. of the Sierra Nevada range.

The peculiarities of each region may be briefly stated as follows:

1. The Atlantic seaboard is moderately moist, and, in general, rather equable. It is, however, subject to summer 'hot spells', and winter 'cold snaps' of a very trying kind. The altitude of the Appalachian system is not sufficient to very materially affect the distribution of heat, winds, and rainfall, so that the change is a gradual one, as we approach the dry interior zone of the Great Mississippi Basin. The latter region, about 1,245,000 sq. M. in extent, is in general warm and moderately equable. Extensive forests supply adequate moisture to the air, but where trees are sparse, the atmosphere becomes excessively dry. The Great Lakes temper this region on the N. and the Gulf of Mexico warms it on the S. Nevertheless Europeans often complain both of great summer heat and extreme winter cold; sensations which the thermometer rarely fails to justify. The numerous local departures from this general condition cannot be considered here.

2. The Plateau and Mountain Region is dry and cold. The higher peaks are Alpine in character. The great plateaus, situated between the border chain of the Sierra Nevada and the Rocky Mts., are on an average 5000 ft. above sea-level. Some of them are fully 6000 ft. high. The climate there is harsh, cold, and very dry. It is a common mistake, however, to suppose that these elevated plateaux are merely barren wastes. Especially at the lower levels richly fertile valleys are everywhere found to alternate with sandy treeless tracts, salt lakes, and marshy wastes. That there are corresponding differences in local climates can only be alluded to in this place. During the height of summer the days are hot, but as soon as the sun sets, the air grows chilly, and the nights are always cold.

3. The mountain slope of the Pacific is characterized by abruptness and great irregularity. Its climate is varied. The narrow strip bordering on the ocean is much warmer, more humid, and very decidedly more equable than corresponding interior latitudes and the Atlantic coast. This Pacific section is farther distinguished by a well-marked wet season, corresponding to the E. winter, and an equally well-defined dry season, corresponding to the E. summer. Moreover, cool summers and mild winters, as well as the complete absence of those extreme variations, which elsewhere mar the climate of the States, render the Pacific coast pleasantly conspicuous. It is here that some of the most popular winter and summer health resorts have been established.

Some Special Features. In regard to temperature, it is significant that, in spite of the wide range of the thermometer, something

like 98 per cent of the entire population inhabit those regions in which the annual means extend from 40° to 70° Fahr. only. Roughly calculated, therefore, the average annual temperature of the whole United States is 55° Fahr. But foreigners are of course more interested in the extremes of heat and cold, which are disagreeably perceptible in almost all the states. The most delightful season of the year is unquestionably the so-called 'Indian summer', *i.e.* the few autumn weeks which precede the actual onset of winter. It would be difficult to imagine anything more exhilarating than the crisp air, brilliant sunshine, clear blue skies, and grateful temperature characterizing the closing days of an 'Indian summer' at its best.

The summer temperature is everywhere higher than in Europe, with the exception of certain districts on the Pacific slopes already alluded to. The hottest regions of the country are naturally the southernmost parts of the southernmost states (Florida, Alabama, Louisiana, etc.). Here the annual mean rises to 75° Fahr., which is almost that of tropical climes. In the valley of the Lower Colorado, in California and Arizona, the summer mean rises to 90° Fahr. In Texas temperatures of 110°, and in Arizona and parts of California of 115°, are no great rarity, and yet here the great dryness of the atmosphere makes the heat seem less oppressive than in humid regions at a much lower range of temperature. In almost all the states of the Union several extremely hot days are to be looked for every summer. And in the more prolonged 'hot spells' the mortality from heat-stroke and diarrhœal diseases becomes alarming to a degree quite unknown in Europe. The severity of the winter is most felt in the elevated parts of New England, the higher plains of N. Minnesota and Dakota, and the lofty mountain plateaux of the Rockies. There the usual mean may descend below 40° Fahr. In upper Minnesota the winter mean is only 10° Fahr. On the whole, it may be said that American winters are more severe than those of Europe, always excepting, of course, the S. states. In the Atlantic and Middle states the winter is generally steady. Ice and snow may be counted on during one-half of the three coldest winter months. But to the W. of the Mississippi great irregularities are experienced. Mild and open periods there alternate with intense cold and violent storms. As we approach the Pacific increased mildness is observed. Continuous snow and ice are unknown along the whole W. coast from Vancouver to San Diego. Moreover, the temperature is so equable there that the winter mean is only 5-15° below that of summer. In the S. occasional cold storms are experienced, although the thermometer at New Orleans, for example, rarely descends below the freezing point. Yet the S. winter is fitful and at times trying. It begins and ends early, lasting from about Nov. until February. But there is absolutely no periodicity in the various irregularities observed, so that elaborate calculations based on averages may be rudely

upset by the eccentricity of certain seasons. It is always well to be prepared for 'any kind of weather' in the United States.

Rainfall. The rainfall is quite unevenly distributed through the United States. In the E. section it is abundant, while the great W. plains and prairies are often parched with prolonged drought. This has led to the general employment there of irrigation, without which agriculture could not flourish. In the strip along the Pacific coast a very plentiful precipitation occurs. The heaviest deposit of rain takes place in the borderlands of the Gulf, namely the S. parts of Louisiana, Mississippi, and Alabama, the E. part of Texas, and the W. coast of Florida. The annual quantity of water amounts to about 65 inches there. But at Philadelphia it is 45 inches, and at Chicago only about 30. All over the E. the rainfall is abundant in spring and summer. It usually occurs in heavy showers, often accompanied by violent electrical discharges. On the Pacific coast, apart from the regularly recurring winter rains, little or no precipitation of water takes place. But at a short distance inland profuse summer rains are again observed. In the mountainous highlands heavy winter snows augment the annual volume of watery precipitation. The most arid tracts of the United States are in W. Arizona, S. Nevada, and S.E. California. The annual rainfall there descends from 15 to 8 inches and less. Broadly speaking the United States may be said to be favoured by an abundance of rain, with a relatively small proportion of rainy days. Fogs occur in the seaboard states, but they are neither as frequent nor as heavy as those known in many European countries.

Winds. The prevailing winds of the United States are westerly, like those of other countries situated in middle latitudes. Around the Gulf of Mexico the main current of the atmosphere moves in an E. or S.E. direction. Along the Atlantic coast region the predominating winds are S.W. in summer, and N.W. in winter. In a large S.W. district, including Nebraska, Kansas, Colorado, Arkansas, Texas, New Mexico, Utah, and Arizona, the summer winds come from the S., and the winter winds have a N. direction. In the region of the Rocky Mountains the winds are so irregular that none of them can be said to be 'prevalent'. In the tract between the Mississippi and the Appalachian ranges, both summer and winter winds are S.W. and W. It may be borne in mind that in the United States the S.W. winds blow over an expanse of warm water, while the N.E. winds hail from a frigid ocean, and the N.W. from frozen deserts.

Storms and Blizzards. The regularly recurring winter storms are most violent on the E. seaboard. The term 'blizzard' is employed to denote the blinding snow-storms with intense cold and high winds, which have their true home only in the W. but which are sometimes observed in the Atlantic States.

Climatic Resorts.

The custom of spending the winter in the South and the summer at the seaside has nowhere assumed more formidable proportions than in the United States, and a few of the more important climatic resorts are named and characterized below. Comp. also the notices throughout the Handbook.

Winter Resorts. The best known winter-stations are in Florida, California, the Carolinas, Georgia, and Virginia. A large proportion of the invalids visiting these regions are the victims of consumption, but sufferers from gout, rheumatism, neurasthenia, chlorosis, anæmia, diseases of the kidneys, affections of the heart, insomnia, chronic bronchitis, asthma, and over-work are often signally benefited by a stay at one or other of the resorts named below. In making one's choice of a winter's residence, the factor of accommodation should not be lost sight of; and it may be stated generally that the sanitary arrangements of American health-resorts are far superior to most places of the kind in Europe. In some of the hotels every conceivable modern comfort and luxury are provided (comp. pp. 524, 539, 617).

In *Florida* (RR. 103-108) the temperature is equable, the atmosphere is neither too dry nor too moist, the sunshine abundant, and the soil sandy. Consumptives do well there, especially in the early stages of the disease. The only drawback is the possibility of malaria; but the dangers arising from this source have been grossly exaggerated. — *Southern California* has, perhaps, the most delightful climate in the world (comp. p. 532). The air is genially warm and dry, yet not enervating as in more tropical climates, and more salubrious general conditions can nowhere be found. *Santa Barbara* (p. 527), *Los Angeles* (p. 532), and *San Diego* (*Coronado Beach*; pp. 537-539) are among the chief resorts, the first named showing the least variation between the day and night temperatures and a very low relative humidity. At San Diego the coast-winds are sometimes inconvenient for invalids with throat-troubles. *San Bernardino* (p. 485) and the attractive town of *Riverside* (p. 486) lie more inland and have a rather bracing, but not irritating, climate, which some consumptives find more beneficial than that of other Californian resorts. *Monterey* (p. 524), *Santa Cruz* (p. 520), *Pasadena* (p. 536), *Redondo* (p. 536), and *San Rafael* (p. 517) have all their special advantages. — *Thomasville* (p. 612), in Georgia, and *Aiken* (p. 606), in South Carolina, are much frequented by weak-chested persons, who find benefit in the balsamic fragrance of their pine forests. The advantages of *Asheville*, North Carolina, have been sufficiently indicated at p. 599. *Old Point Comfort* (p. 563), *Virginia Beach* (p. 562), and *Newport News* (p. 561), in Virginia, are fashionable intermediate stations for invalids on their way back to the North. — *Lakewood* (p. 179), in New Jersey, and *Cumberland Gap Park*, in Tennessee (comp. p. 577), are also favour-

ably known. — *Colorado Springs* (comp. p. 489), *Manitou* (p. 490), and *Saranac Lake* (p. 107) are the chief resorts for the high-altitude treatment of consumption.

Summer Resorts. *Newport* (p. 248), *Nahant* (p. 280). *New London* (p. 242), *Narragansett Pier* (p. 243), *Bar Harbor* (p. 294), *Long Branch* (p. 178), *Atlantic City* (p. 180), *Cape May* (p. 181), and parts of *Long Island* (p. 79) are the most fashionable Seaside Resorts. Sea-bathing in the United States differs somewhat from British and Continental practices. Permanent bath-houses on the beach take the place of bathing-coaches, and the institution of bathing masters is almost unknown. Men and women bathe together. The temperature of the water of the Atlantic Ocean in summer is so warm (often exceeding 70° Fahr.), that bathers frequently remain in it an hour or more, apparently without harm.

The chief Mountain Resorts are in the *Catskills* (p. 97), the *Adirondacks* (p. 104), the *White Mts.* (p. 320), the *Green Mts.* (p. 315), the *Berkshires* (p. 337), and the *Alleghenies* (p. 566, etc.).

The United States contains nearly 9000 Mineral Springs. While, however, these waters are chemically equal to any in the world, it must be admitted that their scientific employment for the cure of disease has not hitherto been developed as at the famous European spas. *Saratoga Springs* (p. 119) has, perhaps, the best claim to ranking with the latter in its mode of life and methods of treatment. The celebrated *Hot Springs*, *Arkansas*, are described at p. 590. Among the most popular Sulphur Springs are *Blount Springs* (Ala.), *Blue Lick Springs* (Ky.), *White Sulphur Springs* (p. 566), *Sharon* (p. 96), *Mt. Clemens* (p. 362), and *Richfield Springs* (p. 131). — Good Iron Waters are found at *Sharon* (p. 96), *Schooley's Mt.* (p. 140), and *Milford* (N. H.). — *Crab Orchard* (Ky.), *Bedford* (p. 190), and *Saratoga* (p. 119) have good Purgative Springs. — Among well-known Thermal Waters are those of the *Hot Springs*, *Arkansas* (see above), *San Bernardino* (p. 485), *Calistoga* (p. 518), *Klamath Springs* (p. 505), and *Salt Lake* (p. 503).

XIV. The Fine Arts in America.

a. Painting and Sculpture,

by

William A. Coffin.

Marvellous progress in the fine arts has been made in the United States since the Centennial Exhibition at Philadelphia in 1876, when popular interest in Art received a decided impulse; and for twenty years thereafter the influx of American artists returning in large numbers from study in the European art centres, principally from Paris, had a strongly marked influence on the tendencies of the American school. Now, however, it shows a distinc-

tive character of its own. Before proceeding, however, to the consideration of the conditions in which American art stands before the public at the present day, it is pertinent to give briefly some account of its earlier history.

Previous to the Revolutionary period we find a Scottish artist named *John Watson* painting portraits in Philadelphia about 1715, and another Scotsman, *John Smybert*, similarly occupied in Boston from 1725 to 1751. *John Singleton Copley*, born in Boston in 1737, began to paint portraits there about 1751. He went to London subsequently, became a Royal Academician in 1779, and died in London in 1815. He painted many celebrities of his time in the Colonies, and his works are among those most highly valued in early American art. *Benjamin West*, born at Swarthmore, Pennsylvania, in 1738, painted portraits in Philadelphia in 1756, went to Italy in 1760, and thence to London in 1763. He was elected president of the Royal Academy on the death of Sir Joshua Reynolds in 1792. He died in London in 1820, and his works, both portraits and compositions, are to be found in collections in the United States and England. One of his most celebrated pictures, 'Death on the Pale Horse', belongs to the Pennsylvania Academy of Fine Arts in Philadelphia, and the Boston Museum possesses his 'King Lear', another notable work. *Charles Wilson Peale* (1741-1827), who was a colonel in the Continental army, painted portraits of Washington (see pp. 62, 163, 324) and other men of the time that are of historical and artistic interest. *John Trumbull* (1756-1843), son of Jonathan Trumbull, Colonial Governor of Connecticut, a graduate of Harvard and (like Peale) a colonel in the army who had previously given his attention to the art of painting, gave up his commission and went to London to study under West. He is best known as a painter of military pictures representing the battles of the Revolution and the French and English war in Canada, but also painted numerous portraits and miniatures. An interesting collection of his works belongs to the Yale University (see p. 236 and also p. 214).

Gilbert Stuart, born at Narragansett, Rhode Island, in 1755, is the most famous of all the portrait-painters of the Revolutionary period, and his work compares very favourably with that of his contemporaries in Europe. He was a pupil of West in London and returned to America in 1792. He settled in Boston, after painting portraits two years in New York, Philadelphia, and Washington, and died there in 1828. The best portraits of Washington are those from his hand, and the list of his other portraits is a long one, including many of the best known men in the first Congresses of the United States and military and civic dignitaries. Portraits by Stuart are in the collections at the Museum of Fine Arts, Boston (p. 266); at the Metropolitan Museum (pp. 62, 63), the Lenox Library (p. 50), and the New York Historical Society (p. 54), New York; and at the Pennsylvania Academy of Fine Arts, Philadelphia (p. 166). *John*

Vanderlyn (1776-1852) and *Thomas Sully* (an Englishman who came to America at an early age; 1783-1872) were portrait-painters of note contemporary with Stuart and Trumbull. *Washington Allston*, born in South Carolina in 1779 and a graduate of Harvard in the class of 1800, went to London to study in the schools of the Royal Academy in 1801. He settled in Boston in 1818, and painted historical and religious subjects as well as portraits. One of the best of his works is the 'Jeremiah' in the Yale University collection (p. 236), and there are others at the Boston Museum of Fine Arts (p. 266). *Samuel F. B. Morse* (1791-1872), the inventor of the telegraph, who graduated at Yale in 1810 and was a pupil of Allston, devoted himself to painting in the beginning of his career in the first quarter of last century. His portrait of Lafayette is in the City Hall, New York (p. 38).

On the 8th of November, 1825, a number of young artists and students in New York established the New York Drawing Association. On the 16th of January, 1826, they chose from their number fifteen artists who were directed to choose fifteen others, and the thirty thus selected constituted a new society which was called the National Academy of Design. Among the first fifteen of these founders of the Academy were *Thomas S. Cummings*, *William Dunlap*, *Asher B. Durand*, and *Henry Inman*. Among the second fifteen were *Thomas Cole*, *William Jewett*, *Rembrandt Peale*, *John Vanderlyn*, and *Samuel Waldo*. Thomas Cole was the first American landscape-painter, and Durand and *Thomas Doughty* were prominent among those who followed his lead in taking up this branch of painting. Inman was a noted portrait-painter, as were Waldo and Jewett, Vanderlyn (who has already been mentioned), and Rembrandt Peale. In the years following the founding of the Academy *G. P. A. Healey* (who went to Paris to study under Baron Gros and Couture), *Thomas Rossiter* and *William Hunt* of Boston (pupils of Couture), *William Page*, *Daniel Huntington*, *Charles L. Elliott*, and *Robert W. Weir* among others gained wide reputations as portrait and figure painters, and in landscape *John F. Kensett* and *S. R. Gifford* became especially famous. Some of the contemporaries and the immediate successors in point of historical sequence of these men, elected to membership in the Academy or chosen as Associates, from about the middle of the forties to the beginning of the seventies, form what is sometimes referred to as the 'Older School' of American painters. The Academy held its eighty-third annual exhibition in the spring of 1908.

In sculpture the first American artists to be noted are *John Frazee*, *Hiram Powers*, and *Horatio Greenough*, one of whose representative works is the equestrian statue of Washington in Smithsonian Institution at Washington (p. 221). *Thomas Crawford*, *Randolph Rogers*, *Thomas Ball*, *W. W. Story*, and *Henry K. Brown*, whose equestrian statues of Washington in Union Square, New York (p. 42), and of General Scott at Washington (p. 226) are especially worthy of mention

among the achievements of the earlier American sculptors, should be grouped with Frazee, Powers, and Greenough, though they are chronologically later. This summary brings us to the period uniting the old and new, the time when American art, having made for itself a dignified place in the national civilization, was conservative in its processes and faithful to time-honoured traditions and had not yet felt to any appreciable degree the influences of the great revival that followed the appearance of Delacroix and Géricault, the famous men of 1830, and the Fontainebleau group in France. We find *Huntington*, *Baker*, *Le Clear*, *Eastman Johnson*, *Hicks*, and others prominent as portrait-painters; *Guy*, *J. G. Brown*, *Henry*, *Loop*, *Mayer*, and *Wilmarth*, noted painters of figure subjects; *F. E. Church*, *Bierstadt*, *Blakelock*, *Cropsey*, *Bellows*, *Whittredge*, *Thos. Moran*, *De Haas*, *David Johnson*, *James M. Hart*, *Wm. Hart*, *McEntee*, *Homer Martin*, *Wyant*, and *Inness*, the chief painters of landscapes, marines, and cattle-pieces, and *J. Q. A. Ward* and *Launt Thompson*, the sculptors of the day. We find in their work sincerity of purpose, much artistic feeling, and individuality. Except in a few cases, such as that of Inness, there is little to show that their art had developed under other than indigenous influences.

American art at the present time, broadly speaking, means art in New York, for though there is much that is of value produced in Boston and Philadelphia and something worth noting here and there in some other cities, the best work of the artists in these places is usually seen in New York. In considering the modern 'Movement' in New York it is fair to say that we cover the whole country, and the condition of the fine arts in the United States may be measured by applying the gauge to what is to be seen in New York. If a few individual factors be thus omitted, it does not affect the test as a whole. It was in 1877 and 1878 that the first of a little band of artists that has now grown into an army almost, and has sometimes been styled the 'New School' and sometimes the 'Younger Men', made their appearance in New York and excited public interest by their work at the Academy exhibitions. They came from their studies in Paris and Munich and with characteristic American promptitude founded a society of their own. Some of the home artists who were in sympathy with their aims joined with them, and the new society called the American Art Association was formed at a meeting held in New York on June 1st, 1877, at which *Augustus Saint-Gaudens* (d. 1908), *Wyatt Eaton*, *Walter Shirlaw*, and *Mrs. R. W. Gilder* were present; and before the first exhibition was held in the spring of 1878 the names of the following artists, among others, were placed on the roll of the society: *Olin L. Warner*, *R. Swain Gifford*, *Louis C. Tiffany*, *J. Alden Weir*, *Homer D. Martin*, *John La Farge*, *William Sartain*, *W. H. Low*, *A. H. Wyant*, *R. C. Minor*, and *George Inness*. The name of the organization was changed in 1878 to the Society of American Artists, and it was incorporated under that title

in 1882. It held exhibitions in New York every spring from 1878 to 1907 with the exception of 1885. Its discarded title, the American Art Association, was assumed by a business company, which conducts sales of collections and deals in works of art. The yearly exhibitions of the Society soon came to be considered the most interesting of all those held in the United States. It maintained a high standard, not only encouraging the 'rising men', but also holding the allegiance of those who had achieved a high reputation. Its competition with the Academy had a most wholesome effect in raising the standard of the latter's exhibitions. For the last 10 or 15 years, however, so many painters were members of both institutions, that the two became in a sense but one, though holding separate exhibitions. This eventually led to a very natural combination in April, 1908, when the Society ceased to exist as a separate body and all its members became members of the Academy. In the early nineties the Society had secured, in connection with the Architectural League of New York and the Art Students' League, a permanent home and spacious galleries in the building of the American Fine Arts Society (the executive organization of the alliance) at No. 215 W. 57th St.; and since the union of the two bodies the exhibitions of the Academy have been held here (the so-called Annual Exhibition in March or April, the Winter Exhibition in December or January). The home building of the Academy, with studios and galleries for its permanent collections, is in Amsterdam Ave. (see p. 55).

A high standard of excellence is maintained at the exhibitions of the Academy and the visitor will see at either of them a collection of works that may justly be ranked with the corresponding displays of Europe, though the exhibitions are much smaller than those of London or Paris. It must be pointed out here that the National Academy of Design is a body composed of professional artists only (painters, sculptors, engravers, and architects) and not a lay institution governed by laymen, like the Pennsylvania Academy, the Art Institute of Chicago, the Carnegie Institute at Pittsburg, or the Worcester Academy. The National Academy of Design holds what may be called 'first-year' exhibitions, *i.e.* works are sent to it by the artists from their studios for their first appearance in public, whereas at Philadelphia, Chicago, Pittsburg, and other cities, the exhibitions, though sometimes larger and more comprehensive, are made up in a great part of works that have been shown in New York. These institutions do a commendable service for art by using funds to bring from Europe productions of American artists abroad, and at Pittsburg the works of foreign artists also are thus included.

The number of painters and sculptors whose work is regularly admitted to the Academy Exhibitions (passing its juries being about the only national test of importance that exists) is far too large to permit mentioning more than a few whose reputations are well estab-

lished. Among the prominent painters of figure subjects and portraits are *Winslow Homer*, *Chase*, *Brush*, *Thayer*, *Wiles*, *Dewing*, *Tarbell*, *Benson*, *Vinton*, *Beckwith*, *Alden Weir*, *F. C. Jones*, *Curran*, *Alexander*, *Du Mond*, *Eakins*, *Loeb*, *Kendall*, *Smedley*, *Volk*, *Isham*, *Hyde*, *Cushing*, *Thorne*, *Ballin*, *Lockwood*, *De Camp*, *Glackens*, *Davies*, *Henri*, and *Cecilia Beaux*. Notable among the painters of landscapes, marines, and cattle-pieces are *Tryon*, *Horatio Walker*, *C. H. Davis*, *Kost*, *Hassam*, *Foster*, *Ochtman*, *Murphy*, *Crane*, *Metcalf*, *Ranger*, *H. B. Jones*, *Carlsen*, *Birge Harrison*, *Dearth*, *Redfield*, *Wiggins*, *Dessar*, *Howe*, *Schofield*, *Woodbury*, and *Norton*. The American painters who reside abroad frequently exhibit in New York, and the works of *Sargent*, *Abbey*, *Gay*, *Alex. Harrison*, *Dannat*, *Melchers*, *Bridgman*, *McEwen*, *Pearce*, and others are nearly as well known at home as in Europe. *J. A. McNeill Whistler* (p. 313) was a strong personality in this contingent. The principal sculptors are *Ward*, *French*, *Bartlett*, *Adams*, *Barnard*, *MacNeil*, *Grafly*, *MacMonnies*, *Bitter*, *Dallin*, *Hartley*, *Proctor*, *Taft*, *Martiny*, *Konti*, and *Calder*. The American painters are versatile, and landscapes are often seen by figure men and vice versa. The small number of subject pictures and historical compositions from the Exhibitions is explained by the fact that many of the ablest figure painters devote themselves almost entirely to mural painting. The rise of this branch of the 'fine arts' in the past fifteen years constitutes one of the phenomena of American art, many public buildings throughout the country containing elaborate pictorial decoration, while the sculpture both inside and outside is no less remarkable. Hotels, banks, and private-residences are also elaborately decorated. *Blashfield*, *Mowbray*, *La Farge*, *Low*, *H. O. Walker*, *Simmons*, *Cox*, *Reid*, *Turner*, *Millet*, and *Maynard* are a few of the best known 'mural painters'.

It is fair to say that American art as a whole stands on a level with the best art of to-day in Europe in technical merit and rivals it in individuality. At the Paris Expositions of 1889 and 1900 the American Section was conceded by critics to rank second only to that of France, a judgment affirmed by the jury of awards. At the World's Fairs of Chicago in 1893 and St. Louis in 1904, where the home sections were the largest, comparisons were equally favourable. At the Pan-American Exposition at Buffalo in 1901, where there was no European art and the United States galleries contained what the jury of awards characterized in its report as 'the best collection of American Art ever brought together', visitors were amazed at the high level of achievement attained by the painters and sculptors of the native school. This excellence would be much more generally understood if there were suitable galleries for an annual exhibition in New York comprehensive enough and large enough to impress the public. In the present situation the efforts of the artists are too much scattered, and a great general gathering is needed to secure full appreciation.

With the two Academy Exhibitions, the two water-colour shows, the Architectural League exhibition (which includes decoration and arts and crafts), the 'group' and 'independent' exhibitions, the 'one man shows', the portrait exhibitions by visiting portrait painters from Europe, the exhibitions at the Lotos, Union League, and the Arts Clubs, there is a constant succession of interesting displays in New York from October to May, three or four being often in progress at the same time. The Club Exhibitions afford opportunities to see the works of the American 'classics', such as Copley and Stuart, and the celebrated trio of landscape painters, Inness, Wyant, and Martin, with an occasional Whistler, George Fuller, or Blakelock. The permanent collection of the Metropolitan Museum includes some excellent examples of American art, and the Fifth Avenue dealers exhibit collections of modern European art and 'old masters'.

In Philadelphia annual exhibitions of American art are held at the Pennsylvania Academy of the Fine Arts (founded in 1805), and the permanent collections are valuable and interesting. Exhibitions are also held by the Art Club of Philadelphia and by the Philadelphia Society of Artists. In Boston the collections of the Museum of Fine Arts are of great value both from the artistic and the historical standpoint, and exhibitions of the work of American artists are given each season by the Boston Art Club, the Copley Society, and other societies. In most of the larger cities, such as Chicago, St. Louis, Pittsburg, and Cincinnati, and in many towns in the East and West there are art institutions and schools, and exhibitions to which New York artists are among the contributors are held at regular periods.

Comp. 'History of American Painting', by *Samuel Isham* (illus.; 1907) and 'The History of American Sculpture', by *Lorado Taft* (illus.; 1903).

b. Architecture,

by

Montgomery Schuyler.

The sources of the settlement of the United States were so many and so various that we should expect to find a corresponding variety in the building of the colonies. As a matter of fact, however, by the time the settlements upon the Atlantic seaboard had become sufficiently established to project durable or pretentious buildings, the English influence had become predominant, and the colonists took their fashions from England in architecture as in other things. The Spanish settlements within the present limits of the United States were unimportant compared with those farther to the South. The trifling remains of Spanish building in Florida and Louisiana are not to be compared with the monuments erected by the Spaniards in Mexico, where some of the churches in size and costliness and elaboration of detail are by no means unworthy examples of the Spanish Renaissance of the 17th century. The only considerable town on the Atlantic coast that is not of English origin is New York, which was already a place of some importance when the New Netherlands were ceded to Great Britain by the treaty of Breda in 1667. It was built in the then prevailing fashion of Holland. The 'Flemish Renaissance', which has lately appealed to English architects as containing valuable suggestions for modern building, did not impress the new masters of New Amsterdam. The crow-stepped gables and steep tiled roofs of the Dutch settlers were displaced by dwellings and warehouses of

English architecture executed by English mechanics. It is unlikely that any specimen of Dutch architecture was erected, either in New York or in Albany (which retained its Dutch characteristics longer), after the beginning of the 18th century. There are now no Dutch buildings left in New York, and the last in Albany has lately been demolished. There are, however, here and there Dutch farmhouses left on Long Island and in New Jersey; the Van Cortlandt manor-house still stands at Croton on the Hudson (see p. 70); a manor-house of the Van Rensselaers, patroons of Rensselaerswyck, has been re-erected at Williamstown (p. 343), whither it was recently removed from Albany; there is an occasional Dutch church in the oldest parts of New York State and New Jersey; and part of the Phillipse manor-house, now the City Hall of Yonkers (p. 86), is of Dutch architecture. These relics are all of the 17th century and are interesting rather historically than architecturally.

The public buildings of the colonial period were mainly churches, and these, where they were more than mere 'meeting-houses', were imitated from the churches of Sir Christopher Wren and his successors. Of these St. Michael's (p. 604), built in 1752 in Charleston, is the most conspicuous and perhaps the most successful. Burke, in his 'Account of the European Settlements in America' (1757), says of it: 'the church is spacious and executed in very handsome taste, exceeding everything of that kind which we have in America'. The design is attributed, on the strength of a contemporaneous newspaper paragraph, to 'Mr. Gibson', but this is probably a mistake for Mr. Gibbs, the architect of St. Martin's-in-the-Fields in London and the Radcliffe Library at Oxford, being at the time one of the most successful of English architects and perhaps the most distinguished of the immediate followers of Wren. The resemblances between St. Michael's and St. Martin's tend to strengthen this conjecture. St. Paul's (p. 37) in New York (1756) was the most important of the colonial churches of the city and in style resembles St. Michael's, being ultimately inspired by Wren's city churches in London.

A local tradition refers the design of the College of William and Mary (p. 562), at Williamsburg, Va., to Sir Christopher Wren himself, but the architecture scarcely bears out the legend. It is, however, in Virginia and in Maryland that the colonial architecture is seen at its best. The great tobacco-planters of those colonies formed a real landed gentry, such as could scarcely be said to exist in any other of the colonies, excepting the holders of manorial grants on the Hudson River, who were much fewer in numbers. The farmers of New England and Pennsylvania were a yeomanry and there were very few landed proprietors in New England who could rival the scale of living of the tobacco-planters, whose estates and agricultural operations were extensive, whose habits were hospitable and commonly extravagant, and who lived up to their easily acquired incomes. They possessed real 'seats', and these are the most pretentious and the most interest-

ing examples of colonial domestic architecture. Such mansions as Brandon, Shirley, and Westover in Virginia (see pp. 561, 560), and Homewood and Whitehall in Maryland, testify to a high degree not only of social refinement on the part of their owners but of skill on the part of the artisans who built them, for the profession of architecture was almost if not quite unknown to the colonies. The architecture of these mansions consisted in a simple, almost invariably symmetrical composition, often a centre with wings connected with it by a curtain wall, in a careful and generally successful proportioning of these parts and of the stories, which were usually two and very rarely more than three, and in the refined though conventional design and skilful execution of the detail, especially of the detail in woodwork. The porch was the feature of the front, and in houses of much pretension generally exhibited an order, consisting of a pair of columns sustaining an entablature and a pediment. The bricks were imported from England, or often, in the northern colonies, from Holland, and stone was sparingly employed. Many of the country seats of the landed gentry have been piously preserved, but in towns the colonial houses have been for the most part destroyed. Annapolis (p. 209), in Maryland, named after Princess Anne, has been left on one side by the march of improvement and remains to show many specimens of the Georgian architecture, which still give it a strong resemblance to an English town that has remained inactive for a century.

The colonial architecture continued to prevail after the close of the politically colonial period. The first Capitol of the United States at Washington was a very good specimen of it, although the design of it has been obscured by the later additions in a different taste. Although the plan which was accepted was the work of an amateur, to whom the design of the building was really due, the work of construction was assigned to a trained architect later. At the instigation of Jefferson, then President and himself a dabbler in architecture, the architect attempted to compose an 'American order' by conventionalizing the foliage of plants peculiar to this continent. Some of the capitals engendered by this essay are to be seen in the interior of the Capitol (p. 216), but it is upon the whole fortunate that no attempt was made to employ them in the exterior decoration. The building was burned by the British in 1814, but was rebuilt with additions and variations during the next decade. To the same period belong the State House of Massachusetts at Boston, the City Hall of New York, and the Merchants' Exchange of Philadelphia, all specimens of educated and discreet architecture, as it was at that time understood in Europe.

The inspiration of these works and of others like them was distinctly Roman. The Greek revival that was stimulated in Europe by the publication of Stuart's work on Athens was somewhat belated in reaching the United States, where the Roman Renaissance of Wren and his successors was in full possession. The Grecian temple was adopted at the national capital as the model of a modern public

building about 1835, with such modifications as were compelled by practical requirements. The Treasury, of the Ionic order, the Doric building of the Interior Department, commonly called the Patent Office, and the Corinthian General Post Office were among the first fruits of this cult. From Washington it gradually spread over the United States, Girard College (p. 169) at Philadelphia and the Sub-Treasury and the Custom House at New York being among the finest and most monumental of the American reproductions. For the next 15 years the Grecian temple in stone or brick was commonly adopted for churches as well as for public buildings, while it was reproduced in wood for dwellings of architectural pretensions, either in town or country. In 1851 the extension of the Capitol at Washington was begun. It consists of two wings, fronted with Corinthian colonnades, making the extreme length of the building 750 feet, and the addition of a central dome of cast iron, which attains the disproportionate height of over 300 feet and is, in other respects, not very successfully adjusted to the building which it crowns. The Capitol thus completed became the model for American public buildings. Nearly all the State Houses have followed its general disposition and have included a lofty dome.

Although there are some earlier churches in a style which the designers of them believed to be Gothic, the Gothic revival in the United States may be said to have begun with the erection of Trinity Church (p. 36) in New York in 1846, which remains, perhaps, the most admirable piece of ecclesiastical architecture in that city. Within a few years thereafter Gothic had almost entirely superseded classic architecture as a style for churches, although in commercial buildings the models of the Renaissance were preferred, and these were imitated in fronts of cast-iron to an extent quite unknown elsewhere. The Gothic designers, however, insisted upon the applicability of their style to all uses and made many essays of more or less interest, in public, commercial, and domestic building, of which there are examples in all the Atlantic cities.

Up to this time, although among the leading American architects were Germans and Frenchmen as well as Englishmen, and an increasing proportion of native designers who had made their studies at the Ecole des Beaux Arts, or in the offices of Continental architects, the architecture of the country had upon the whole been a faint and belated reflection of the current architecture of England. This continued to be the case during a brief season of experiments with 'Queen Anne'. But at this time there arose an American architect whose personal force, manifested for the most part in his own free version of the Southern French Romanesque, very deeply impressed his contemporaries and his successors and greatly affected the building of the whole country. This was *Mr. H. H. Richardson* (1838-86), who came into a national celebrity with the completion of Trinity Church, Boston, in 1877, when the author was thirty-nine years old.

In the nine years of life that remained to him, he made such an impression upon his profession that almost every American town bears traces of his influence. His own most noteworthy works, besides Trinity, are the county-buildings at Pittsburg (p. 198), the Senate Chamber, the Court of Appeals, and the Western Staircase of the Capitol of New York at Albany (p. 93), the Albany City Hall (p. 94), the Cincinnati Chamber of Commerce (p. 406), Sever Hall and Austin Hall at Cambridge (pp. 271, 272), and a warehouse in Chicago (p. 375). As might have been expected, he has had many imitators, but the extent and the value of his services to American architecture are best seen in the work of architects who have recognized the force that lay in his simple and large treatment, and have recognized also that the force of this treatment was independent of the detail he employed and of the style in which he worked. This lesson has been learned and applied by the architects of many of the towering 'elevator buildings' erected for commercial purposes, which are so marked features of the American cities, and are the unique contribution of American architects to their art. The earliest of the elevator buildings were the Western Union building (since partly destroyed and rebuilt) and the Tribune building (p. 38) in New York, and these are but a generation old. The architectural problem presented by these structures was entirely new, and no precedents could be invoked for their treatment. Many of the different solutions of it offered by American architects were of high ingenuity and interest. The passenger elevator, however, is but one of the two elements that have enabled the construction of the later American 'sky-scraper', and the less important. The more important s the 'steel frame', introduced almost simultaneously, about 1889, in New York and Chicago. This renders the buildings constructed by means of it independent of the walls of masonry, now become a mere veneer, and they can be attenuated accordingly to the 'irreducible minimum' of the metallic frame. Hence become practicable such prodigies of altitude as the 'Singer' and 'Metropolitan' towers in New York (pp. 37, 44) and as a pending design for the new building of the Equitable Society, in the same city, which threatens to overtop the Tour Eiffel in Paris. Unhappily, artistic expression of these structures has neither been attempted or even sought, except in such comparatively unimportant instances as the Singer Building in Broadway near 14th Street, New York (not to be confounded with the Singer Building of the tower, lower down Broadway), or as the Bayard Building in Bleecker Street in that city. In the main the modern sky-scraper of the steel frame continues to be in its design a reminiscence of the building of masonry, and hence it is of little or no interest properly architectural. In public buildings, the modern French style, imported by graduates of the Beaux Arts, is at present in undisputed control.

While American architects have been compelled to contribute to architecture a new type in the elevator building, they have won suc-

cesses not less genuine, though of course less startling, in domestic architecture. Here also they are almost equally independent of convention, and this, as is often apparent in their successful essays, not from ignorance but from deliberate choice. The discipline of the schools has enabled a designer to produce work that is clearly scholarly and as clearly not scholastic. Dwellings of recent erection are to be found in the suburbs of Boston, in the new 'West Side' of New York, on all three 'sides' of Chicago, and indeed in all the chief towns of the North and North-West that are so far from being examples of styles that they betray a complete freedom of eclecticism and that are yet evidently the work of accomplished and artistic designers. The massiveness of the Romanesque in which Mr. Richardson worked sometimes even in his hands degenerated into a coarseness and clumsiness that are especially repugnant to the spirit of domestic architecture. His imitators have exaggerated these defects and omitted the qualities which in his work atoned for them, and the most successful of recent American dwellings that can be classified as Romanesque are of a lighter and more enriched Romanesque than that which he employed. The French Renaissance of Francis I. has appealed to many of the architects as a style at once free and picturesque and at the same time refined, and some interesting houses have been done in it, especially in New York (comp. p. 49) and Philadelphia. In country-houses, also, American architects have had their successes, and a fairly comprehensive view of their achievements in this kind can be had from a sojourn at any of the watering-places on the coast of New England or New Jersey. Architecturally as well as otherwise Newport is the most interesting of these.

The European historians and critics of architecture who have so long been insisting that 'Art is not archæology' may find in the current building of the United States that precept reduced to practice. An absolute freedom is the rule alike among competent and incompetent architects, subject with the former class to the artistic unity of the resulting work. In commercial and domestic architecture, along with much wildness and crudity, this freedom has produced much that is interesting and suggestive to the European student of architecture, and that gives good hope for the progress of architecture in the United States.

XV. Sports and Games,

revised by

Ralph Cracknell.

The interest in outdoor sports, which once confined itself to those distinctively American pastimes, baseball and the trotting race, has within the last forty years grown at once more catholic and more intense. Every form of sport now has its devoted admirers, who follow it with the energy and the enthusiasm which are part of the

American character. The rapid and widespread growth of this taste for games seems mainly due to the increase of wealth, the example of schools and colleges, and the general recognition of the necessity of relief from the strain of business or professional work. The significant note of American sports is the completeness of their organization.

To enter into the spirit of American pastimes, an Englishman need only learn to admire the gait of the trotting horse and to admit the merits of baseball. Almost all other sports are conducted substantially upon English models. The *Running Horses* (*i.e.* race-horses) are all of English blood; *Football* as played in the United States is an Americanization of the Rugby game; *Lawn Tennis*, *Cricket*, *Lacrosse*, *Golf*, and *Polo* are played in the same way in both countries; while *Yachting*, *Rowing*, *Canoeing*, and *Athletic Sports* are equally popular on each side of the Atlantic.

Though the theory that **Baseball** is a development of '*Rounders*' is sometimes disputed, the 'National Game' may soon be understood by anyone familiar with the old English pastime. Baseball, however, has been differentiated into a distinctively American game, with every position on the field highly specialized. Its rapid thinking, its quick throwing, the wonderful control of the ball in pitching, catching, and fielding, its skilful base-running, and the fact that a game lasts less than 2 hrs. constitute its appeal to the American people. It is played in every village, town, and city, and by practically every school, college, university, and athletic club in the country; but the games most worth seeing are those of the (professional) *National League*, in New York, Boston, Brooklyn, Cincinnati, Chicago, Philadelphia, Pittsburg, and St. Louis; and of the *American League* in New York, Boston, Philadelphia, Washington, Chicago, St. Louis, Cleveland, and Detroit. These games are largely attended, crowds of 15,000 or 20,000 being not uncommon. The club 'representing' each of these cities plays a series of home-and-home games with every other; the winner of the greatest number is the champion of the year. These two major 'Leagues' are fed by about 40 minor 'Leagues', comprising 300 clubs with nearly 5000 players. Among these are the *Eastern* (including two Canadian clubs), *American Association*, *Southern*, *Pacific Coast*, and *Western*. The best amateur games are those of the colleges (especially *Harvard*, *Yale*, *Pennsylvania*, *Princeton*, *Georgetown*, *Cornell*, *Brown*, and *Dartmouth* in the East). The professional season begins in April and ends in October. A baseball team consists of nine men, including the pitcher, catcher, and seven fielders, with substitutes for every position. Large salaries are paid to the best professional players, amounting in some cases to $ 10,000 (2000*l.*).

Horse Races. See p. 22 under New York. Other meetings are held during the season in or near Cincinnati, Louisville, New Orleans, Washington, Saratoga, Lexington (Ky.), San Francisco, and elsewhere. The racing at these tracks is of varying quality, but rarely as good as on the New York circuit. Meetings under the auspices of the National Steeplechase and Hunt Association are held annually at New York and at the Country Club, Brookline (p. 257), near Boston.

Trotting Races take place during the season, from May to October, on 1500 tracks in the United States, owned by racing associations or by county and state fair associations, as well as on many private tracks at brood-farms and elsewhere. Stakes, purses, and added money amount to more than $ 3,000,000 annually; and the capital invested in horses, tracks, stables, farms, etc., is enormous. The tracks are level, with start and finish directly in front of the grand stand, and are either 1 M. or $\frac{1}{2}$ M. in length. They are always of earth, and are usually elliptical in shape. The horses are driven in two-wheeled 'sulkies' of little weight, and the hand-

icapping is exclusively by time-classes. Records of every race are kept by two national associations. Horses that have never trotted a mile in less than 2 min. 40 secs. are in one class; those that have never beaten 2.35 in another; those that have never beaten 2.30 in a third; and so on down to 2.2, which has been beaten but a dozen times. Races are always trotted in heats, and the winner must usually win three heats, though a sensible movement has been recently inaugurated, with the support of most of the 'Grand Circuit' tracks, to award the race to the horse which first wins two heats. With a dozen entries (or even six or eight, the more usual number) a race may occupy an entire afternoon, and require many heats before a decision is reached. Betting is common at every meeting, but is not so prominent as at running tracks. The pacing gait is becoming more common, and at many race-meetings the purses offered for the pacing iclasses are almost as numerous as those offered for the trotters. The best races are to be seen at the tracks of the 'Grand Circuit'. This circuit holds meetings, of from four to eight days each, in or near Detroit, Columbus (O.), Buffalo, Kalamazoo (Mich.), Poughkeepsie, Readville (Mass.), Syracuse, Providence, and Hartford (Conn.). The Great Western Circuit holds meetings at Peoria (Ill.), Terre Haute (Ind.), Libertyville (Ill.) Kalamazoo (Mich.), Galesburg (Ill.), Davenport (Ia.), Dubuque (Ia.), Hamline (Minn.), Milwaukee (Wis.), Peoria (Ill.). Pekin (Ill.), and Springfield (Ill.). The Pacific coast also has a circuit. The big Kentucky Breeders' Meeting is held at Lexington (p. 582). Trotting and driving clubs are found throughout the country. A feature of many of these meetings is the attempt of ramous horses, accompanied only by a running or pacing mate, to 'break fhe record' for a mile. In 1903 the trotting-record was for the first time brought within two minutes, when 'Lou Dillon' covered the distance in $1.58^1/_2$ at Memphis. At the same meeting, 'Dan Patch' reduced the pacing record to $1.56^1/_4$, and he has since brought this down to 1.55. The best brood-farms for the development of trotting and pacing horses are in Kentucky and California. Each farm has an annual auction-sale of its produce, either at home or in New York City.

Hunting is much in vogue in the neighbourhood of New York, though the place of a fox is generally taken by a 'drag'. There are frequent meets with one of the packs of *Meadowbrook*, *Rockaway*, *Orange*, or *White Plains*. Boston (Myopia, Middlesex, and Norfolk), Philadelphia, and Washington also support packs. In Virginia much hunting is done in the Piedmont Valley. The wild fox is hunted in the *Geneseo Valley* (N. Y.), at *Media* (Pa.), and at *Barre* (Mass.). Fox-shooting over a single hound is practised by associations of farmers and others, usually in country inaccessible to horsemen.

Shooting and Fishing are generally open to all-comers during the legal season, upon payment in some cases of a moderate fee to the authorized state official, though the number of game and fish preserves is increasing. The *Game Laws* are different in each of the States and Territories and cannot be conveniently condensed. Copies of them may be obtained on application from the State Fish and Game Commissions.

Of the 33,000 sq. M. in the state of *Maine* about one-half is an almost uninhabited wilderness of forest. Here are 1500 lakes, thousands of streams and rivulets, and miles upon miles of hunting-grounds, where the sportsman may find large game and small and fishing and shooting of almost all kinds. His visit should be made not earlier than the middle of July, when the black fly has passed. By law he may fish in fresh water from May to Sept. inclusive, and hunt from Oct. to Dec. inclusive, the greater sport being permitted from the day the quieter ceases. The open season for deer begins on Oct. 1st, for moose on Oct. 15th; non-residents pay a licence-fee of $ 15 (for bird-shooting $ 5). Bears, foxes, wild-cats, and wolves may be killed at any time, and opportunities for doing so are not unlikely to occur. Ducks, geese, loons, and herons abound; and small game of every kind is common. The region may be entered at *Greenville*, on *Moosehead Lake* (p. 301), the largest sheet of water in the State. Here guides may be obtained at $ 3 per day, who furnish canoes, cooking utensils, and tents.

It is best, of course, to camp out. For this, one guide is required for each visitor; food will cost about $1 per day, and other equipment may be purchased beforehand, or hired at Greenville or any other point selected for entering the woods. A good rifle, a pole (fishing-rod), lines, flies, reels, stout boots, and plenty of blankets — these are the necessities, and beyond these one may take an outfit as complete or as modest as desired. Care should be taken in the selection of guides. In July and Aug. it is not easy to get good ones. A party of four, with four or five guides, is as large as is desirable. — The region may be entered from the other side, almost as conveniently, from the stations on the Bangor & Aroostook R. R. between Norcross and Ashland.

The *Rangeley Lakes* (p. 293) are more accessible than Greenville, but the hunting there is not so good, though the fishing is excellent, particularly in May and June. The wilderness may be penetrated in canoes from either point for hundreds of miles, with increasing chances of game.

The *Adirondack Region* (p. 104) has a smaller area than the Maine wilderness, and the shooting is not so good. Deer may be met with, however, the open season lasting from Sept. 1st to Nov. 15th. But although large hotels, steam-launches, and even railroads are now found throughout the Adirondacks, the trout-fishing is still excellent. The season lasts from April 16th to Aug. 31st. A large part of the region is owned by the State and reserved as a public park. August is the best month for a visit; and the sportsman may go directly to one of the hotels in the region, relying upon the guides, provisions, and equipments there to be found.

There is also good hunting in the mountains of Pennsylvania, the Virginias, Tennessee, and North Carolina; and in the Far West the biggest game is found. Deer are abundant, too, in Louisiana, Mississippi, Florida, and Alabama, and venison has within recent years been cheaper than beef in the markets of New Orleans. But the limits of this article forbid more than a mention of these facts.

Wild Fowl abound on the coast from Maine to Florida; the season for duck, etc., usually opens about Sept. 1st and continues to April.

Tarpon Fishing in the deep-sea water off Florida, best from Feb. to May, is a superb sport (comp. p. 611).

Buffaloes are nearly extinct. There are not over 1000 on the continent; of these 500 are in Yellowstone Park, where the sound of a gun is never heard. Another herd is preserved in the Corbin Park, N. H. (p. 314).

The *Mountain Sheep* and *Rocky Mountain Goat*, in the Far West, are generally protected by law from Jan. to Sept.; in some States they cannot be legally killed at all.

Bicycling. This sport is less popular than it was a few years ago, and the use of the 'wheel' is largely confined to children and to workmen riding to and from their daily task. The roads in the United States are not good for wheeling, except near large cities and in a few eastern states. There has, however, been a marked improvement in recent years, due in part to the growth of motoring (see below). The *League of American Wheelmen*, though much smaller and less influential than of yore, has still affiliations with various foreign bodies and can be of considerable service to the tourist. The *National Cyclists' Association*, which is affiliated with the Amateur Athletic Union, the American Automobile Association, and the International Cyclists' Union, is the governing body for track and road racing. Racing (generally motor-paced) is still popular at Boston, Revere (Mass.), Vailsburg (N. J.), Salt Lake City, Ogden, and San Francisco. Motor-cycling is increasing in favour and has its own association. The *Cyclists' Touring Club* of England is represented in the United States by a Chief Consul (Mr. Frank W. Weston, 166 Devonshire St., Boston, Mass.) and Consuls in many towns and cities. Manufacturers or dealers, from whom information may be sought and wheels hired, are to be found in almost every town.

Motoring. Motor-cars are now exceedingly numerous in the United States, especially near the larger cities and at fashionable summer-resorts. In 1907 the value of cars produced in the United States amounted to $ 105,000,000, while over 1000 foreign cars were imported (value $ 3,000,000).

Racing is carried on near most of the large cities, but, as no especial tracks have been constructed, this is attended with considerable danger. A meeting is held every March on Ormond Beach (p. 620). The Glidden Tour to the White Mts. (p. 320) is an annual outing for the motorists of New York, Boston, Chicago, and other large cities. — The *American Automobile Association* (437 Fifth Ave., New York), representing a score or more of State Associations and 160 clubs, has 19,000 members. Members of foreign clubs, on presentation of their membership card, will be courteously received. Information as to roads and touring is given by its Touring Board at *Buffalo* (760 Main St.). It publishes a *Year Book* and a large *Blue Book*, with routes and maps (4 vols., $2½ each). Automobiles of foreign manufacture, imported by the owners personally for bona fide touring purposes, are entitled to free entry under bond for a stay of three months.

Lawn Tennis. The annual *All-comers Tournament* is held at Newport in August; the winner plays the champion of the year before for the championship at singles. A *Western Championship Tournament* at doubles occurs in Chicago in July, and an *Eastern* in Boston; the winners of these meet at the Crescent Club of Brooklyn, after which the survivors play the title-holders at Newport. The *Ladies Championships* are decided in Philadelphia. All these are open to members of recognized clubs, American or foreign. The Davis International Challenge Trophy, presented by Mr. Dwight F. Davis of St. Louis, was won by the brothers Doherty in 1903 and taken to England, where it was captured by the Australasians in 1907. There are many minor tournaments during the season (May to Oct.), usually open to strangers. *Intercollegiate* and *Interscholastic Tournaments* are held in the Eastern states. The Indoors Championship is decided annually in the Seventh Regiment Armoury, New York (p. 52). The *National Association* is the governing body, and there are clubs and courts in every city, and in many of the smaller towns and villages as well.

Tennis, Racquets, Squash Racquets, and Hand Ball. Tennis is played in New York, Boston, Philadelphia, Newport, Hamilton (p. 283), Tuxedo (p. 142), Aiken (p. 606), Lakewood (p. 179; private court of Mr. George Gould), and Roslyn (L. I.; private court of Mr. Clarence Mackay). The United States Amateur Championship is decided annually. Racquets and Squash Racquets are played at many athletic and country clubs throughout the country, and championship meetings are held. Hand Ball is also common; it is not identical with the English game of Fives.

Basket Ball, founded a few years ago as a mild indoor substitute for football, spread rapidly all over the country and became so rough that special measures had to be taken for its regulation. It is played in winter in halls or gymnasia, by teams of five a side, the object being to throw the ball (resembling an Association football) into baskets suspended at the ends of the arena. An elaborate system of passing, throwing, and blocking has been developed. It is played by colleges, schools, the Y.M.C.A., and clubs, and championship meetings are held. It is also played at girls' schools and colleges, both indoors and out.

Cricket. The best clubs are in Philadelphia (see p. 160); in New York, Chicago, the Massachusetts mill-towns, and San Francisco cricket is played by Englishmen, and elevens are maintained by Harvard, Cornell, and the colleges in or near Philadelphia. The game, however, has never secured a good foothold, as Americans do not appreciate either drawn matches or the time spent over first-class encounters.

Golf has become very popular in the United States, where there are now at least 1000 clubs and 250,000 players. The *U. S. Golf Association*, to which most of the local organizations belong, holds annual tournaments for the National Amateur Championship, the Open Championship, and the Ladies Championship. Other smaller but important organizations are the *Western*, *Metropolitan*, *Philadelphia*, *Massachusetts*, *Western Pennsylvania*, *Southern*, and *Pacific Coast Associations*. The best course in the country is that of the Myopia Hunt Club at Hamilton, Mass. (p. 283), but there are several very good ones near New York, Chicago, Pittsburg, and St. Louis. In winter golf is played at many places in the South and on the Pacific

Coast, the 'green' being usually of sand or earth. State, district, and other local competitions are numerous. Public links are maintained at New York, Boston, Brooklyn, Chicago, and Indianapolis.

Polo. There are about forty polo-clubs in the country, the most important being the *Meadowbrook*, *Rockaway*, and *Westchester Country Club*, near New York; the *Myopia* and *Dedham Clubs* near Boston; the *Bryn Mawr* and *Philadelphia Country Clubs* near Philadelphia; the *Chevy Chase Club* near Washington; the *Onwentsia Club* near Chicago; the *Westchester Polo Club* at Newport; and the *Point Judith Country Club* at Narragansett Pier. In the South polo is played at Aiken (S.C.) and at Camden (S.C.). The headquarters of the *Army Polo Club* are at West Point. The *Polo Association* is the governing body, arranging handicaps and fixing championship and other competitions.

Lacrosse. This Canadian game is played at the Crescent Athletic Club of Brooklyn, the grounds of which are at Bay Ridge (Long Island). It is played also by the following colleges, which arrange home-and-home matches: Harvard, Hobart, Columbia, Stevens, Lehigh, Swarthmore, and Johns Hopkins.

Yachting. The principal clubs are in New York, on long Island Sound and near Boston. The New York Yacht Club, by far the largest, holds its most important annual races off Newport, the Eastern Yacht Club off Marblehead (Mass.). The sport is popular all along the Atlantic coast, and there is no little sailing, generally of small craft, on the Great Lakes and other inland bodies of water. The races for the famous international trophy known as the America Cup, which have occurred 12 times since 1870, are held on Ocean courses off New York Bay.

Rowing. The *National Association of Amateur Oarsmen* is the governing body, and holds an annual regatta, over a different course each year. Subsidiary associations are the *New England*, the *Middle States*, the *Harlem*, and the *Southern*. The best eight-oared college crews are those of *Harvard*, *Yale*, *Columbia*, *Cornell*, *Wisconsin*, and *Pennsylvania Universities*. Harvard and Yale race at New London (p. 242) in June; the others on the Hudson River.

Canoeing. The *American Canoe Association*, which is the parent of various sectional associations, holds an annual meeting in Aug., usually in Northern New York. There are canoeists on almost every stream in the country, and many clubs. Sailing is developed somewhat at the expense of paddling; in other respects the customs are similar to those in England.

Football. The game played is a development of the Rugby game (chiefly due to Mr. Walter Camp of Yale), but is played with teams of eleven a side instead of fifteen, and with a much more complicated code of playing-rules and tactics. *Yale*, *Harvard*, *Princeton*, *Pennsylvania*, *Cornell*, *West Point*, *Annapolis*, the *Carlisle Indians* (p. 189), *Dartmouth*, and *Brown* have the best elevens in the East; *Chicago*, *Michigan*, *Wisconsin*, and *Minnesota* in the West. The important matches between these elevens are played in November, and 30,000 or even 40,000 spectators are often present. Almost every college and school in the country have elevens, but there are no professional teams. The evils of mass plays and questionable tactics which formerly marred the game have been largely removed by recent legislation and college sentiment. Association football, which is gaining ground, is played by Englishmen in mill-towns and near large centres of population and by Columbia, Cornell, Pennsylvania, Harvard, and other colleges. Rugby football is played at California colleges. The season for American football is very short, beginning in Sept. and closing with the last of November.

Bowling ('Ten-Pins') is a favourite amusement of both sexes throughout the United States, and alleys are attached to most gymnasia and athletic club buildings, as well as to many summer-hotels and amusement-halls. Tournaments of local interest are constantly held during the winter months, and the *American Bowling Congress* has an annual competition in February for the national championship, each year in a different city.

Athletics. The track-events are the same as those contested in England, though the character of the country and the climate make long-distance

and cross-country running relatively less popular, and the short races (100 yards to ½ M.) are more generally contested. An innovation is the very short sprint (30-50 yards), at indoor winter games. In hurdle-racing and jumping the standards are very high; walking is not much practised. In weight-throwing the rules differ radically from the English. The chief athletic clubs are the *New York A. C.*, the *Boston A. A.*, the *Columbia A. C.* (Washington), the *Southern A. C.* (New Orleans), the *Crescent A. C.* (Brooklyn), the *Chicago A. C.*, the *Irish-American A. C.* (New York), the *Olympic A. C.* (San Francisco), the *Buffalo A. C.*, the *Detroit A. C.*, the *Duquesne A. C.* (Pittsburg), and the *A. C. of the Schuylkill Navy* (Philadelphia). Most of these hold spring and autumn meetings; and indoor games are held in armouries and other large halls, so that the season practically lasts throughout the year. It is at its height, however, in May and June. Many of the colleges send representatives to the *Intercollegiate Athletic Association's* meeting, which is held each year in May on the track of one or other of the leading Eastern universities; Harvard, Yale, Pennsylvania, and Cornell lead the others. There are also scores of less important intercollegiate and interscholastic meetings during the spring and early summer. — *Military Athletics* have become very popular with the National Guard, etc.; and a *National Military Athletic League* has been formed. — *Gaelic Sports*, with Gaelic football, hurley, etc., are often held at Celtic Park, Long Island, and in the suburbs of Boston.

Rifle Shooting. The *National Rifle Association* holds an annual meeting at Camp Perry (Ohio), with various inter-state and inter-club matches. An American team, shooting at Bisley, England, captured the Olympic championship in 1908, and the Americans also won the international championship at Ottawa in the previous year. Rifle-shooting clubs abound, and boys are encouraged to compete.

Boxing and **Wrestling** have many devotees. Prize-fighting is forbidden by law in most states, but pugilistic encounters, where they are permitted, as in Philadelphia, Los Angeles, San Francisco, Colma (Cal.), and Nevada, draw thousands of spectators. The *Armory Athletic Association* of Boston is the largest private boxing club in the country (2000 seats). There are several other clubs at New York and New Orleans. University Championship and other amateur boxing meetings are held.

Fencing. The *American Fencers' League* has members in many cities and holds championship and division championship tournaments. There is also an *Intercollegiate Association*, to which the Eastern colleges belong, including West Point and Annapolis.

Ballooning. The headquarters of the *Aero Club of America* is at New York (12 E. 42nd St.), and there are similar clubs at Philadelphia, St. Louis, and Pittsfield. Ascents are frequent. The international race for the James Gordon Bennett Cup, started from St. Louis in 1907, was won by Dr. Oscar Erbsloeh in the German balloon 'Pommern', which landed at Asbury Park (N.J.), 876¾ M. from St. Louis.

Archery. The *National Association* holds an annual championship meeting.

Roque (*i. e.* scientific croquet). The *National Association* holds its annual meeting at Norwich (Conn.). Roque is played at nearly all the country clubs.

Trap Shooting. The *Inter-State Association* holds national competitions, the Grand American Handicap being the chief event of the year. Clubs abound near all the large cities. Harvard, Yale, and Princeton hold intercollegiate competitions.

Swimming. Athletic clubs and colleges encourage competitions in swimming. Public baths are increasing in number, and there are usually swimming tanks in the athletic clubs. The *Amateur Athletic Union* governs the sport in the matter of dates for competitions, and amateur standing. — *Water Polo* is played at the athletic clubs.

Winter Sports. The severity of the northern winters offers opportunity for many exhilarating outdoor sports. *Skating*, *Coasting*, *Snow-Shoeing*, and *Tobogganing* are enjoyed by millions, and the large number of citizens of Norwegian or Swedish origin has led to the introduction of the Scandi-

navian pastime, *Ski-Running*, into the States, where it has been adopted with enthusiasm. *Ice-Hockey*, *Ice-Yachting*, and *Curling* are also practised in many parts of the country. Many colleges and schools, as well as golf and country clubs, do much to foster winter-sports.

XVI. Educational, Charitable, Penal, and Industrial Institutions.

The object of many visitors to the United States is to study its systems of schools, prisons, or charities, or to inspect the working of its leading industrial establishments. For such visitors the subjoined brief index-lists may be serviceable.

a. Educational Institutions,

[by *President Nicholas Murray Butler* of Columbia University.

Public Education is regulated by the several States. The United States Bureau of Education, established in 1867 (Dr. Elmer Ellsworth Brown, present Commissioner of Education), maintains a library and educational museum at Washington and issues an annual report. It has, however, no direct authority over education in the States.

Each State maintains an elaborate system of public schools; those of the N. and W. States (*e. g.*, New York, Massachusetts, New Jersey, Michigan, Minnesota, Iowa, California, etc.) are especially well organized and administered. In addition to providing free elementary and secondary education, many of the W. States maintain free universities, the original funds for the endowment of the same having been derived from the sale or rental of public lands given by Congress for the purpose. Among the chief of these are the University of Michigan at Ann Arbor (p. 383), the University of Wisconsin at Madison (p. 385), the University of California at Berkeley (p. 466), the University of Minnesota at Minneapolis (p. 392), and the University of Illinois at Champaign (p. 588).

As a rule, however, the great colleges and universities are private foundations managed by a corporation or board of trustees. Of these the ildest is Harvard University (founded in 1636) at Cambridge (p. 270). In 1906-7 the gross annual expenditure of Harvard, excluding the cost of new buildings, amounted to nearly $2,000,000. About 5000 students were in attendance in 1907-8. The other great universities of this class are the Johns Hopkins University at Baltimore (p. 207, founded in 1876), which has had a profound influence on higher education in America; Columbia University in New York (p. 66; founded as a college in 1754, reorganized as a university in 1890); Cornell University at Ithaca (p. 145; founded in 1865); Yale University (p. 235; founded in 1700); Princeton University (p. 156; founded as a college in 1746); the University of Pennsylvania (p. 171); and the University of Virginia, Charlottesville (p. 565; founded in 1819). Among more recently founded institutions are the Catholic University of America at Washington (p. 227), the University of Chicago (p. 377), and Stanford University (p. 522).

There are about 400 colleges in the United States in addition to the great universities. Well-known colleges are Amherst (p. 243), Dartmouth (p. 346), Williams (p. 343), Hamilton (Clinton, N. Y.), Oberlin (p. 356), Lafayette (p. 145), Rutgers (p. 156), and Knox (Galesburg, Ill.).

The leading colleges exclusively for women are Wellesley (p. 241), Vassar (p. 88), Smith (p. 341), Radcliffe (p. 272), and Bryn Mawr (p. 188).

Technological education is given at Harvard, Columbia, Cornell, and many of the other universities, as well as at institutions exclusively for that purpose. Of the special schools for the training of engineers, architects, etc., the most worthy of a visit are the Massachusetts Institute of Technology (p. 263), Stevens Institute of Technology (p. 73), Rensselaer Polytechnic Institute (Troy, p. 128), Rose Polytechnic Institute (Terre Haute, p. 409), and the Carnegie Technical Schools (Pittsburg, p. 199).

Of city school systems the best are, perhaps, those of New York (p. 10), Minneapolis (p. 390), Indianapolis (p. 401), Denver (p. 471), Kansas City (Mo.; p. 423), Boston and Brookline (pp. 253, 274), and Cleveland (p. 353). Duluth (p. 393), Detroit (p. 353). Springfield (p. 239), and Denver have the finest high-school buildings and equipment. Kindergartens will be found in the public schools of New York, Washington (p. 211), Boston, Philadelphia (p. 158), San Francisco (p. 509), and elsewhere.

Literature: The Annual Reports of the United States Commissioner of Education, of the Carnegie Foundation for the Advancement of Teaching, of the State and Municipal School Authorities, and of the Presidents of the great universities, all of which may usually be had free on request. The only work giving a complete view of the American educational system is 'Education in the United States' (2 vols., Albany, N. Y.; J. B. Lyon Co.), a series of 20 monographs by different writers.

b. Correctional and Charitable Institutions.

Penal Institutions. New York State Penitentiaries, at Ossining (p. 87) and Auburn (p. 133). — Institutions on Blackwell's Island (p. 71). — Eastern Penitentiary at Philadelphia (p. 168; the only prison in the country managed on the 'separate system'). — Western Penitentiary, at Pittsburg (p. 200). — Massachusetts State Prison, at Charlestown (p. 273). — Boston House of Correction, at Deer Island (p. 274). — Northern Illinois Penitentiary, at Joliet (p. 420). Southern Illinois Penitentiary, at Chester (p. 430). — Ohio Penitentiary, at Columbus (p. 350). — California State Prisons, at San Quentin and Folsom.

Reformatories. New York State Reformatory, Elmira (p. 142). — Massachusetts Reformatory, Concord (p. 309). — Reformatory Prison for Women, South Framingham, Mass. (p. 241). — Pennsylvania Industrial Reformatory, Huntingdon (p. 190). — Michigan Reformatory, Ionia (Mich.). — Ohio Reformatory, at Mansfield (p. 349). — Illinois Reformatory, at Pontiac (Ill.).

Lunatic Hospitals and Asylums. Mount Hope Retreat for the Insane, Baltimore (p. 209). — Eastern Michigan Asylum for the Insane, Pontiac (Mich.). — State Lunatic Asylum, Utica (p. 131). — Willard Asylum for the Insane, Willard (N.Y.). — Massachusetts Lunatic Hospital and Asylums, at Worcester (p. 241), Danvers (Mass.), Westborough (Mass.), and Waverley (Mass.). — Ohio Asylums for the Insane, at Columbus (p. 350), Toledo (p. 356), and Cleveland (p. 353). — Hospital for the Insane, in Philadelphia (p. 172). — Illinois Eastern Hospital for the Insane, at Kankakee (p. 401). — Hospital for Dipsomaniacs and Inebriates, at Foxborough (Mass.).

Institutions for the Blind. Perkins Institution for the Blind, Boston (p. 269). — Illinois Institution for the Education of the Blind, Jacksonville (p. 424). — New York Institutions for the Blind, at New York (p. 55) and Batavia (p. 135). — Pennsylvania Institution for the Instruction of the Blind, Philadelphia (p. 158). — Ohio Institution for the Education of the Blind, Columbus (p. 350).

Institutions for the Deaf. The most important of these are at Northampton (p. 344), Flint (Mich.), New York City (p. 69), Columbus (p. 350), Indianapolis (p. 402), Jacksonville (p. 424), Hartford (p. 238), Philadelphia (p. 158), Knoxville (p. 577), and Delavan (Wis.).

Reformatories for Youth. Among the largest of these are the institutions at W. Meriden (p. 237), Plainfield (p. 157), Baltimore (p. 203), Carroll (Md.), Westborough (Mass.; for boys), Lancaster (Mass.; for girls), Lansing (p. 361), Jamesburg (N.J.), Randall's Island (p. 71), Rochester (p. 135), Westchester (N.Y.), Lancaster (Ohio), Cincinnati (p. 405), Philadelphia (p. 158), Morganza (Pa.), Providence (p. 243), and Waukesha (p. 383).

c. Industrial Establishments.

I. Metallic Industries and Machinery. Homestead and Edgar Thomson Steel Works, near Pittsburg (see p. 200); Pennsylvania Steel Co., at Steelton (p. 189) and Sparrow's Point (p. 204); Cambria Steel Co., Johnstown

(p. 191); Illinois Steel Co., Chicago (p. 370); iron and steel works at Cleveland (p. 353), Buffalo (p. 136), Wilmington (p. 202), Bethlehem (p. 182), Sharon (p. 232), and Birmingham (p. 58); agricultural machinery at Chicago (p. 370; McCormick), Louisville (p. 567; Avery), Columbus (p. 349), Akron (p. 232), Springfield (p. 404), Canton (p. 349), Moline (p. 426), and Hoosick Falls (p. 335); sewing machines at Bridgeport (p. 235) and Elizabeth (p. 156); brass works at Bridgeport (p. 235), Waterbury (p. 239), and Meriden (p. 237); silver and plated goods at Providence (p. 243), New York (p. 10; Whiting Co.), Meriden (p. 237), Taunton (p. 253), and Attleboro (p. 245); bicycles at Hartford (p. 237); stoves at Troy (p. 128) and Buffalo (p. 136); wire at Worcester (p. 240); nails at Wheeling (p. 352); safes at Cincinnati (p. 405); smelting works at Denver (p. 471). — II. Textile Industries. Cotton at Manchester (p. 313), Lawrence (p. 286), Fall River (p. 252), New Bedford (p. 279), Lowell (p. 312), Chicopee (p. 344), Baltimore (p. 204; cotton-duck), Columbia (p. 603), Charlotte (p. 570), and Augusta (p. 607); woollens at Lawrence (p. 286), Lowell (p. 312), and Providence (p. 243); linen at Willimantic (p. 246); carpets at Philadelphia (p. 161) and Lowell (p. 312); silk at South Manchester (Ct.) and Paterson (p. 140); shirts and collars at Troy (p. 128). — III. Food Products. Flour at Minneapolis (pp. 391, 392) and St. Louis (p. 412); malt liquors at St. Louis (p. 413), Milwaukee (p. 382), and Rochester (p. 135); wine at St. Louis (p. 410), Charlottesville (p. 565), and in California (comp. p. 519); whiskey at Louisville (p. 567) and Peoria (p. 400); meat packing at Chicago (p. 379), Kansas City (p. 424), and Omaha (p. 418); sugar at Brooklyn (p. 75) and Philadelphia (p. 161). — IV. Glass and Pottery. Trenton (p. 157); Elwood (Ind.); Findlay (Ohio); Wheeling (p. 352); Pittsburg (p. 200). — V. Carriages. Columbus (p. 349); South Bend (p. 357; Studebaker); Concord (p. 313); Cincinnati (p. 406); New York (p. 10; Cunningham). — VI. Railway Rolling Stock. Pullman (p. 380); Buffalo (p. 136); Dayton (p. 404); Philadelphia (locomotives; p. 168); Altoona (p. 190); Omaha (gasolene railway-cars; p. 418); Schenectady (locomotives; p. 130), Richmond (locomotives; p. 555). — VII. Ships. Philadelphia (p. 171); Chester (p. 202); Wilmington (p. 202); San Francisco (p. 512); Cleveland (p. 354); West Superior (p. 395; whalebacks); Bath (p. 292; sailing vessels). — VIII. Paper. Holyoke (p. 344); Springfield (p. 239; envelopes). — IX. Oil. Cleveland (p. 354); Bayonne (N. J.); Memphis (p. 586; cotton-seed oil); New Orleans (p. 633; cotton-seed oil). — X. Tobacco. St. Louis (p. 412); Richmond (p. 556); Durham (p. 570); Jersey City (p. 73). — XI. Fire-Arms. Springfield (p. 239); Hartford (p. 237). — XII. Boots and Shoes. Lynn (p. 280); Brockton (p. 278). — XIII. Pianos. New York (Steinway); Boston (p. 293; Chickering). — XIV. Watches. Waltham (p. 306); Elgin (p. 417); Waterbury (p. 239). — XV. Electric Works. Lynn (p. 280; Thompson-Houston); Schenectady (p. 129); Newark (p. 156; Edison). — XVI. Marble Quarries of Vermont (Rutland; p. 310) and Tennessee (Knoxville; p. 577). — XVII. Chemicals & Drugs. Solvay Process Co. at Syracuse (p. 132) and Detroit (p. 359); other works at Detroit (pp. 359, 361); St. Louis (p. 413; Meyer); Richmond (p. 555); Charleston (p. 601); Sault-Ste-Marie (p. 397). — XVIII. Furniture. Grand Rapids (p. 362) and Detroit (p. 358). — XIX. Naval Guns and Armour. Bethlehem (p. 182); Pittsburg (p. 197); Philadelphia (p. 158). — XX. Automobiles. Detroit (p. 358); Dayton (p. 404); Hartford (p. 237); Cleveland (p. 353); Buffalo (p. 136); Jackson (p. 363); Springfield (p. 239); Chicopee (p. 344); Lansing (p. 361).

Comp. 'The Progress of the United States in its Material Industries', a statement issued by the Department of Commerce and Labour.

XVII. Bibliography.

The following is a very small selection of the most recent, interesting, and easily accessible books on some of the main topics on which visitors to the United States should be informed. A few records of the impressions of British travellers are included. Numerous other works of local interest are referred to throughout the text of the Handbook (comp. also p. cii).

The American Commonwealth, by *James Bryce* (the best and most comprehensive account of the political and social institutions of the United States). — History of American Politics, by *Alex. Johnston* (4th edit., 1898). — American Political Ideas, and Civil Government in the United States, two lucid little books by *John Fiske* (1885 and 1890). — Our Government, by *Macy* (1887). — Actual Government as Applied under American Conditions, by *Prof. Albert Bushnell Hart* (1904; with a good bibliography). — See also the Johns Hopkins University Studies in Historical and Political Science, ed. by *Prof. Herbert B. Adams;* The Federalist, a series of essays by *Hamilton, Madison*, and *Jay* (1787-88; ed. by *H. C. Lodge*, 1888); and the works by *De Tocqueville* (1835), *Von Holst* (1876-85), *Cooley* ('Constitutional Law'), and *Ashley* ('The American Federal State').

Histories of the United States, by *George Bancroft*, *J. B. McMaster*, *Justin Winsor*, *R. Hildreth*, *J. Schouler*, *Henry Adams*, *Rhodes* (with best account of the Civil War), *Woodrow Wilson*, *Channing*, *McLaughlin*, *Goldwin Smith* (a brief but admirable outline). *E. E. Sparks* ('Story of the Nations Series'), and *T. W. Higginson* (for children). See also Vol. VII. of the *Cambridge Modern History* (1903). — The American Nation, a history from original materials by associated scholars, edited by *Prof. Albert Bushnell Hart*, is a complete and comprehensive work, the successive volumes of which appeared between 1904 and 1909. — *W. E. H. Lecky* gives a good account of Colonial conditions in his History of England in the Eighteenth Century (1878-90). — A Short History of the War of Secession, by *Rossiter Johnson* (1888). — The American Revolution, by *Sir George Otto Trevelyan* (Part I, 1899; Part II, 1903). — American Statesmen, a series edited by *John T. Morse, Jr.* — American Historic Towns, a series edited by *Lyman P. Powell* (1902 et seq.). — Story of the Civil War, by *J. C. Ropes* (1894). — *John Fiske's* excellent works on special periods and phases of American history practically form a connected story down to the establishment of Federal government. — American History told by Contemporaries, edited by *A. B. Hart* (1897-1901). — The Story of the Revolution, by *Henry Cabot Lodge* (1899). — Financial History of the United States, by *Davis L. Dewey*. — Comp. Guide to the Study of American History, by *Edw. Channing* and *A. B. Hart* (1896).

The United States, by *Prof. J. D. Whitney*, is a mine of information on the physical geography and material resources of the country (1889), while The United States: A Study of the American Commonwealth, edited by *Prof. N. S. Shaler* (1894), is still more comprehensive in its scope. North America, by *Israel C. Russell*, is an account of the continent from the point of view of the geographer ('Regions of the World Series'; 1904). Comp. *Elisée Reclus'* Nouvelle Géographie Universelle (vols. xv-xix, 1890-94), and *Henry Gannett's* United States (vol. ii of North America in *Stanford's* Compendium of Geography, new issue, 1898). — The Stately Homes in America, by *H. W. Desmond* and *H. Croly* (illus.; 1903). — Highways and Byways of the South (1905), and Highways and Byways of the Pacific Coast (1908), both by *Clifton Johnson*.

The American Geological Railway Guide, by *James MacFarlane*, is a unique compilation, showing the geological formation at every railway station (procured from Author, Woodland Road, Pittsburg; price $ 1½). Comp. also the Geological Guide Book of the Rocky Mountain Excursion of the International Congress of Geologists, by *S. F. Emmons* (1894).

Society in America, by *Harriet Martineau* (1837). — Some Impressions of the United States, by *E. A. Freeman* (1883). — American Notes, by *Charles Dickens* (1842). — My Diary, North and South, by *Sir W. H. Russell*

relating to the Civil War). — White and Black in America, by *Sir George Campbell* (1889). — Jonathan and his Continent, and A Frenchman in America, by *Max O'Rell* (1889 and 1891). — Our Kin across the Sea, by *J. C. Firth* (1888). — The Land of the Dollar, by *G. W. Steevens* (1897). — America at Work, by *J. Foster Fraser* (1903). — American Traits, by *Prof. Hugo Münsterberg* (1901). — The Americans, by *Prof. Hugo Münsterberg*, translated by *Dr. Holt* (1905). — The American Scene, by *Henry James* (1907). — The Future in America, by *H. G Wells* (1906). — America, the Land of Contrasts, by *J. F. Muirhead* (4th edit., 1907; also published in the 'Tauchnitz Series').

Alaska, see p. 679; Boston, p. 257; California, pp. 533, 514; Grand Canyon of the Colorado, p. 431; Cuba, p. 662; Mexico, p. 641; New Orleans, p. 633; New York, pp. 28, 36; Porto Rico, p. 669; Washington Capitol, p. 214; Yellowstone Park, p. 450; Yosemite Valley, p. 541.

Maps. The leading *General Maps* of the United States are those of the General Land Office and the U. S. Geological Survey (Washington). The former also publishes a series of maps (10-18 M. per inch) of those states in which public lands have existed (*i.e.* all except those on the Atlantic seaboard). — The only official *Detailed Maps* of any part of the United States are those of the Geological Survey, published on three scales (1 : 62,500 or about 1 M. per inch; 1 : 125,000 or 2 M. per inch; and 1 : 250,000 or 4 M. per inch). About 1,000,000 sq. M. have been surveyed, in various parts of the country. These maps can be obtained only from the Director of the Geol. Survey, who will send a list on application (each sheet 5 c.). The U. S. Coast Survey is producing charts of the coast, which may be obtained at Washington or from the agencies of the Survey in the large maritime cities. Charts of the Great Lakes, published by the U. S. Corps of Engineers, may be purchased from the Chief of Engineers (Washington). The maps of the Wheeler and Hayden Surveys, covering extensive regions in the West (4 M. per inch), can now be obtained only of second-hand booksellers. Maps of the whole or parts of their states have been published by the Geological Surveys of New Jersey, New Hampshire, Pennsylvania, Kentucky, Wisconsin, Missouri, Arkansas, Texas, Minnesota, California, etc. — *Messrs. Rand & McNally* publish maps of all the States in the Union.

1. From Europe to New York.

As most European visitors to the United States land at New York, the following brief notes on the chief oceanic routes to that port may be of service. Lines also run from European ports to Boston (p. 253), Philadelphia (p. 158), Baltimore (p. 203), etc. Many of the steamers on the principal lines are equipped with wireless telegraphic apparatus. For general hints as to the voyage, see p. xv.

a. From Liverpool to New York.

This is the route followed by the *Cunard Steamship Co.* and by some of the steamers of the *White Star Line*. The fastest steamers take about 5½ days from port to port (comp. p. 3), the slowest 8-9 days. The distance varies from 3000 to 3100 nautical miles (ca. 3400-3550 Engl. M.) according to the course followed. New York time is 5 hrs. behind that of Liverpool.

The Cunard turbine-steamer 'Mauretania' holds the record for the fastest passages from New York to Queenstown (4 days 20 hrs. 15 min.) and from Queenstown to New York (4 days 17 hrs. 6 min.). These two steamers are the largest vessels afloat (790 ft. long, 88 ft. wide; horse power 68,000; gross tonnage 32,500; displacement 45,000 tons).

Liverpool, see *Baedeker's Handbook to Great Britain*. Passengers board the Atlantic steamers from the Landing Stage. As we pass down the wide estuary of the *Mersey*, we see the crowded docks of Liverpool to the right, while to the left lies *New Brighton*, with its pier, fort, and lighthouse. The mouth of the river is marked by a lightship, which we reach in about 2 hrs. after starting. Farther on, in clear weather, we see the Welsh coast to the left (S.), with the *Little* and *Great Orme's Heads* backed by the distant *Snowdon Group*. Later we skirt the N. coast of the *Isle of Anglesey*, then turn to the left, and steer to the S.W. through *St. George's Channel*, soon losing sight of land. The *Skerries* (lighthouse) lie off the N.W. point of Anglesey.

The first part of the Irish coast sighted is usually *Carnsore Point*, in *Wexford*, the S.E. corner of the island, off which lies the *Tuskar Rock Lighthouse*. In about 12-15 hrs. after leaving Liverpool we enter the beautiful inner harbour of *Queenstown* (about 240 knots from Liverpool), where a halt is made to take on board the mails and additional passengers.

On leaving Queenstown, we skirt the S. coast of Ireland for some distance, passing several bold rocky headlands. The last piece of European land seen is usually the *Fastnet Rock* (lighthouse), off *Cape Clear Island*, 60 M. to the S.W. of Queenstown, or, in clear weather, *Dursey Island*, with the adjacent *Bull Rock Lighthouse*.

In crossing the Atlantic Ocean from E. to W. the steamer descends through about 11 degrees of latitude (Queenstown 51° 50′ N. lat.,

New York 40° 42′ 43″). The course varies somewhat according to the season of the year and from other causes. The northerly route (followed from July to Jan.) takes the steamers over the *Grand Bank of Newfoundland* (30-80 fathoms), while the southerly route followed for the rest of the year passes to the S. of it. *Icebergs* are occasionally seen above 42° N. lat. and between 45° and 50° E. long. Whales, porpoises, etc., are also seen from time to time. The 'day's run' of the steamer, given in nautical miles (7 'knots' = about 8 Engl. M.), is usually posted up every day at noon in the companion-way. The traveller should remember that his watch will gain about $^3/_4$ hr. daily in going W. and lose the same amount in going E.

The following list of the colours of the funnels ('smoke-stacks') of the principal steamship-lines will help to identify passing steamers. *American*, black, with white band; *Anchor*, black (English flag); *Atlantic Transport*, red, with black top; *Compagnie Générale Transatlantique*, red, with black top (French flag); *Cunard*, red, with black top and three narrow black bands; *Hamburg*, buff (express steamers) or black (German flag); *Holland-America*, black, with green and white bands; *Italian*, black, with central white band; *North German Lloyd*, buff; *Red Star*, black, with white band; *Scandinavian*, black, red, and black; *White Star*, salmon, with black top.

The first American land sighted is usually either *Fire Island* (p. 80) or the *Navesink Highlands* (p. 177), each with a lighthouse; but before either of these we see the *Nantucket Lightship* (192 M. from the Sandy Hook Lightship), which communicates by wireless telegraphy with Siasconset (comp. p. 278) and reports incoming vessels. About 3 hrs. after sighting land we approach *Sandy Hook Bar*, the Highlands standing out boldly to the left. The chief points for crossing the bar are the *Ambrose Channel* (40 ft. deep, 1000 ft. wide) and the *Gedney Channel*, while smaller ships may also use the *South Channel*. The time of the voyage is reckoned to (or from) Ambrose Channel Lightship. We leave the lighthouse of *Sandy Hook* (p. 177; white light) to the left, enter the *Lower Bay of New York* (p. 31), and steer to the N. toward the *Narrows*, or entrance to *New York Bay* proper (p. 31), between the wooded *Staten Island* (p. 72) on the left and *Long Island* (p. 79) to the right. On the former are *Fort Wadsworth*, *Fort Tompkins*, and a lighthouse; on the latter lies *Fort Hamilton*, while on a rocky island in the channel is *Fort Lafayette*, where many Southerners were confined during the Civil War. About 3 M. farther up is the *Upper Quarantine Station* (at *Clifton*), off which all vessels anchor until they have been cleared by the officer of the Board of Health. About halfway between the Quarantine Station and New York, to the left, is *Robbins Reef*, with a lighthouse.

As we advance up the beautiful ***New York Harbour** (p. 31), the city of *Brooklyn* (p. 74) lies to the right and *Jersey City* (p. 73) to the left, while *New York* lies straight ahead. *Liberty* or *Bedloe's Island*, with the colossal statue of *Liberty enlightening the World* (p. 71), lies nearly in mid-channel, while *Governor's Island* (with *Castle Williams;* headquarters of the Military Department of the

VICINITY OF NEW YORK

0 1 2 3 4 5 6 7 8 9 10 Statute Miles

1: 560.000

0 2 4 6 8 10 12 14 16 Kilometres

Wagner & Debes' Geogr. Estab.t Leipzig.

Atlantic) lies to the right, close inshore. To the left, beyond Liberty Island, is the small *Ellis Island*, where emigrants now land (comp. p. 72). *Brooklyn Bridge* (p. 40), spanning the *East River* (p. 31) and connecting New York with Brooklyn, is seen to the right, with glimpses of the newer bridges beyond.

As the steamer approaches her dock, in the *North (Hudson) River*, the conspicuous features in New York include the *Whitehall*, *Washington*, and *Bowling Green Buildings* (pp. 33, 34), towering over the *Custom House* (p. 33); the *Singer Building* (612 ft. high; p. 37) and many other 'sky-scrapers' in *Broadway* (p. 34), almost hiding the spire of *Trinity Church* (p. 36); the *West Street Building* (Pl. B, 2; *I*); the huge twin structures of the *Hudson River Tunnel Terminal* (p. 37); the *St. Paul* (p. 37) and *Park Row Buildings* (p. 38); and the gilded dome of the *Pulitzer Building* (p. 38). Passengers are landed directly on the wharf, attend to the custom-house examination of their baggage (comp. p. xv), and then drive to their destination, either taking their trunks with them or entrusting them to one of the numerous transfer-agents or express-agents who meet the steamer (comp. p. xviii).

New York, see R. 2.

b. From Southampton to New York viâ Cherbourg.

This is the route followed by the *American Line (International Mercantile Marine Co.)*, sailing under the American flag, and also by some of the steamers of the *White Star Line* (p. 1). The distance from Southampton to New York is 3075 knots, and the usual duration of the voyage is $6^1/_2$-$7^1/_2$ days. Passengers are conveyed by special trains from London to Southampton ($1^3/_4$ hr.). The steamers then proceed to Cherbourg, to meet passengers from Paris (special train at 9.20 a.m.), and leave this port at 5 p.m. Southampton time is 5 hrs. ahead of that of New York.

Southampton, see *Baedeker's Great Britain*. The steamer descends *Southampton Water* and passes through the *Solent*, affording a good view of *Hurst Castle* to the right and of the *Needles* to the left (lighthouse; red flashing light). The time of the voyage is reckoned from this point. To the right lies *St. Alban's Head*. The steamer next crosses to *Cherbourg* (see p. 4) and then proceeds to the W. through the English Channel. *Start Point* (white flashing light) and *Eddystone Lighthouse* (one fixed and one flashing light) in *Plymouth Bay* are seen to the right. The last point seen of the English mainland is *Lizard Head*, in Cornwall, and the last European land sighted is the *Scilly Isles* (lighthouse), about 30 M. to the S.W. of the Land's End. — The rest of the voyage is similar to that described in R. 1a.

c. From Hamburg to New York.

The Express Steamers of the *Hamburg-American Line* ply to New York viâ Southampton and Cherbourg ($6^1/_2$-8 days; from Southampton to Cherbourg, 78 M., in 5 hrs.; from Cherbourg to New York, 3027 M., in

5½-7 days), while the boats of the REGULAR SERVICE run to New York (3505 knots, in 11 d ys) viâ Boulogne-sur-Mer and Plymouth. The 'Deutschland' of this line holds the record for the quickest passages from New York to Plymouth (5 days 7 hrs. 38 min.) and from Cherbourg to New York (5 days 11 hrs. 54 min.).

The Express Steamers start from *Cuxhaven* (landing-stage, with waiting-rooms and restaurant), at the mouth of the Elbe, 58 M. from Hamburg, to which passengers are forwarded by special train (2 hrs.), while the other boats start from Hamburg itself (see *Baedeker's Handbook to Northern Germany*). At Cuxhaven, Southampton, Boulogne, and Cherbourg passengers embark by tenders. Passengers are carried between London and Southampton and between Paris and Cherbourg or Boulogne by special trains. New York time is 4 hrs. 54 min. behind that of Southampton and 5 hrs. 35 min. behind that of Hamburg.

On the SS. 'Amerika' and 'Kaiserin Auguste Victoria' the passengers may be booked on the 'European plan', receiving a rebate of $ 15-25 from the regular fare and paying for their meals in 'Ritz's Carlton Restaurant'. On the 'Deutschland' *à la carte* meals are served in the grill-room.

Leaving *Cuxhaven*, the steamer steers to the N.W., passing the three *Elbe Lightships* and affording a distant view of the red rocks of *Heligoland* to the right. Various other German, Dutch, and Belgian lights are visible. The first English lights are those of the *Galloper Lightship* and the *Goodwin Sands*. Farther on we pass through the *Straits of Dover*, with the English and French coasts visible to the right and left. The steamer of the direct service keeps on her way through mid-channel, while the express steamer hugs the English coast, passes between the *Isle of Wight* and the mainland (with *Portsmouth* to the right), and enters *Southampton Water* (430 knots), where it generally anchors off *Calshot Castle*, to receive the British mails and passengers from *Southampton* (see *Baedeker's Great Britain*). It next proceeds to *Cherbourg* (see *Baedeker's Northern France*), to take on additional passengers and mails. The boats of the regular service embark their Paris passengers at Boulogne. The remainder of the route to New York is similar to that of R. 1b. The docks of the Hamburg-American Line are at *Hoboken* (p. 73), on the W. side of the *North River*, whence passengers are conveyed to New York by large ferry-steamers.

d. From Bremen to New York.

The twin-screw EXPRESS STEAMERS of the *North German Lloyd (Norddeutscher Lloyd)* run to *New York* (3560 knots, in 6½-7 days) viâ *Southampton* and *Cherbourg*, while the slower boats, calling alternately at Southampton and Cherbourg, take about 10 days. Others run to New York direct. The steamers start from (40 M.) *Bremerhaven*, at the mouth of the *Weser*, to which passengers are forwarded by special train. See *Baedeker's Northern Germany*. The 'Kaiser Wilhelm der Zweite' of this line holds the record for the quickest passage from New York to Cherbourg (5 days 8 hrs. 20 min.). All the Express Steamers are provided with 'Vienna cafés'. New York time is 5½ hrs. behind that of Bremen.

On issuing from the mouth of the *Weser*, the steamer steers to the N.W., with the *Jahdebusen* opening to the left. A little farther on it passes the *East Frisian Islands*. The rest of the voyage is similar to that described in R. 1c. *Southampton* is about 460 M. from Bremerhaven.

e. From Havre to New York.

This route is followed by the French steamers of the *Compagnie Générale Transatlantique.* The distance is 3095 knots and the average time 6-7½ days. New York time is 5 hrs. 10 min. behind that of Havre.

Havre, see *Baedeker's Handbook to Northern France.* The steamer steers out into the *English Channel*, affording distant views of *Cape La Hague* and the *Channel Islands* to the left, and of the *Scilly Islands* to the right. The farther course of the voyage resembles that of the steamers of the German and American lines, as above described.

f. From Antwerp to New York.

This is the route of the *Red Star Line* (3310-3410 knots, in 8 days). The steamers sail every Sat. and call at Dover. New York time is 5¼ hrs. behind that of Antwerp.

Antwerp, see *Baedeker's Handbook to Holland and Belgium.* The steamer descends the *West Schelde*, with the Dutch province of *Zealand* on either side, passes (40 M.) *Flushing*, on the island of *Walcheren* (right), and enters the *North Sea.* In very clear weather the towers of *Bruges* and *Ostend* may sometimes be distinguished to the left farther on. The first English land sighted is the high chalk cliffs of the *South Foreland* (see below). The course after the call at *Dover* (see *Baedeker's Great Britain*) is similar to that of the German, French, and American Line steamers (see above).

g. From Rotterdam to New York.

This is the route of the *Holland-America Line*, sailing under the Dutch flag (3400 M., in 8-10 days). At low water the steamers start from the *Hook of Holland.* They call at Boulogne-sur-Mer.

Rotterdam, see *Baedeker's Belgium and Holland.* The steamers descend the *Maas* or *Meuse* and the *Nieuwe Waterweg* (canal), passing the *Hoek van Holland* at its mouth, and enter the *North Sea.* — The subsequent course is similar to that described in R. 1 f.

h. From London to New York.

This is the route of the *Atlantic Transport Line* (3280 knots, in 8½-10 days). The steamers start at Tilbury Docks, reached by special train (½ hr.) from St. Pancras Station. New York time is 5 hrs. behind that of London.

Tilbury, see *Baedeker's Handbook to London.* The steamers descend the estuary of the Thames, passing between *Southend* and *Shoeburyness* on the left and *Sheerness* and *Queenboro* on the right. Rounding the *North Foreland* (light), they steer to the S., passing *Deal*, the *South Foreland* (two fixed electric lights), and *Dover.* The rest of the voyage is similar to that described in R. 1 c.

i. From Glasgow to New York.

This is the route of the *Anchor Line* (2900 knots, in 7½-9 days; from Moville, 2800 knots, in 7-8 days). Passengers may join the steamer at Glasgow, *Greenock*, or *Moville*. The difference of time between Glasgow and New York is 4¾ hrs.

For *Glasgow* and the beautiful voyage down the *Firth of Clyde*, see *Baedeker's Great Britain*. The steamer then rounds the *Mull of Cantyre* and proceeds to the W. along the N. coast of Ireland, affording a view of *Rathlin Island*. [Sometimes the steamer passes between Rathlin and the mainland, affording a distant view (l.) of the *Giant's Causeway*.] Some steamers ascend *Lough Foyle* to *Moville*, the port of *Londonderry*, where mail and extra-passengers are taken on board. On issuing from Lough Foyle the steamer steers at first to the W. and then, after passing *Malin Head*, the northernmost point of Ireland, to the S.W. The last part of Ireland seen is usually *Tory Island* (lighthouse) or *Arranmore*, off the coast of *Donegal*. The general course across the Atlantic is considerably to the N. of that of the Liverpool boats, not joining the latter till the *Banks of Newfoundland* (p. 2).

k. From Copenhagen, Christiania, and Christiansand to New York.

The steamers of the *Scandinavian-American Line* ply from Copenhagen to New York (3705 knots) in about 11 days, calling at (275 knots) Christiania one day and at (165 knots) Christiansand two days after starting. New York time is 5½ hrs. behind that of Copenhagen and Christiania.

Copenhagen, see *Baedeker's Norway, Sweden, and Denmark*. The steamer steers up the *Cattegat* to *Christiania*, at the head of the picturesque *Christiania Fjord*. It then retraces its course through the fjord and follows the coast of Norway to *Christiansand*. Leaving Christiansand, the steamer steers to the W., round the N. coast of Scotland, passing through the *Pentland Firth* and within sight of the *Orkney Islands*. Farther on it turns to the S.W. and eventually joins the route described in R. 1 a, off the Banks of Newfoundland.

l. From Genoa and Naples to New York.

The *Italian Royal Mail Steamship Co. (Navigazione Generale Italiana)* maintains, in conjunction with the steamers of *La Veloce (Navigazione Italiana a Vapore)*, a weekly service on this route, while steamers of the *North German Lloyd*, the *Hamburg-American*, and the *Cunard* lines ply every fortnight (weekly during the height of the season). The distance from Genoa to New York is 4500 knots (13 days), from Naples to New York 4150 knots (12 days). New York time is 6 hrs. behind that of Italy.

For the Italian ports, see *Baedeker's Italy*. Leaving *Genoa* we steer to the S. to *Naples*. We then turn towards the W. to *Gibraltar*. Beyond the straits, our course is slightly to the N. of W.

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2. New York.

The subjoined *General Plan* of New York is referred to simply as Pl.; that of the *Lower Town* or *Business Section* (p. 33) is referred to as Pl. *I* and that of the *Central Section* (p. 42) of the city as Pl. *II*.

a. Arrival. Railway Stations. Steamers.

Arrival. Strangers arriving in New York by sea will find an explanation of the custom-house formalities at p. xv. All the main steamship landings are near tramway-lines (p. 18), and numerous hacks and cabs are always in waiting (bargaining advisable; fare to hotel for 1-2 pers., luggage included, at least $ 2). A few hotels send carriages to meet the European steamers. Transfer Agents (see pp. xviii, 20) are also on hand to receive trunks and forward them to any address (25-50 c.; not always delivered the same day). Travellers landing on the New Jersey (or W.) side cross to New York by ferry, and may often find it convenient to do so in cabs (new tunnels for electric cars, see p. 17). Those coming by railway from the S. and W. cross the river by ferries in connection with the railways, and claim their baggage at the ferry-house in New York (see below). Travellers from Canada and the North, or from the West by the N. Y. C. R. R. route, arrive at the Grand Central Station (see below and p. 52), in the heart of the city, and may use the Elevated Railway (see p. 15), the Subway (p. 16), or the surface-cars (p. 18) to reach their city destination. Cab-fares, see p. 18.

Railway Stations *(Depots)*. The *Grand Central Station* (p. 52; Pl. G, 3), E. 42nd St., between Lexington and Madison Avenues, is, at present, the only terminal station in New York proper. It is a large and well-arranged building, with a restaurant (closed on Sun.) and the other usual appointments of a modern American railway-station, and is used by the trains of the New York Central & Hudson River Railroad (for Canada and the N., Chicago and the W., etc.), and the New York, New Haven, & Hartford Railroad (for Boston and New England, etc.). — Some local trains of the New York Central R. R., for stations up to Spuyten Duyvil (p. 86), start from the station at Tenth Ave. and W. 30th St. (Pl. F, 1), while others (Putnam Division), for Van Cortlandt, Yonkers, etc., start at 8th Ave. and 155th St. (Pl. Q, 2; p. 16).

The other great railway systems have their depots on the New Jersey side of the North River and convey passengers to and from them by large ferry-boats. The ferry-houses, however, furnish the same opportunities for the purchase of tickets, checking baggage, etc., as the railway-stations, and the times of departure and arrival of trains by these lines are given with reference to the New York side of the river. — *Pennsylvania Railroad Depot* (Pl. A. B, 1). Montgomery St., Jersey City, reached by ferries from W. 23rd St. (Pl. F, 1), Desbrosses St. (Pl. C, 2), and Cortlandt St. (Pl. B, 2), used by trains of the Pennsylvania Railroad (for all points in the West and South), and also by the Lehigh Valley, the New York, Susquehanna & Western, and the Long Branch Railroads. For new station in New York and the connecting tunnels, see p. 54. — *Erie Railroad Depot* (comp. Pl. B 1 and map at p. 72), Pavonia Ave., Jersey City, reached by ferries from Chambers St. (Pl. B, 2) and W. 23rd St. (Pl. F, 1), used by the Erie Railroad and its branches. — *West Shore Station* (comp. map at p. 72), Weehawken, reached by ferries from Franklin St. (Pl. C, 2) and W. 42nd St. (Pl. G, 1), used by the West Shore Railroad (for the same districts as the N. Y. Central Railroad) and the New York, Ontario, & Western Railroad. — *Delaware, Lackawanna, and Western Station* (Pl. C, 1) Hoboken, reached by ferries from Christopher (Pl. D, 1, 2), Barclay (Pl. B, 2), and W. 23rd Sts. (Pl. F, 1), or by the new tunnel (p. 17), used by the Delaware, Lackawanna, & Western Railroad (for New Jersey, Pennsylvania, and Western New York). — *Central Railroad of New Jersey Depot* (Pl. A, 1), Communipaw, reached by ferries from Liberty St. (Pl. B, 2) and W. 23rd St.

EAST BOSTON

Penna R.R. Tunnels
Dewitt Clinton Park
Eleventh Avenue
Tenth Avenue
Huds. Riv. R.R.D.
Ninth Avenue
Roosev
Penna R.R.
Eighth Avenue
Central Sta.
Y.M.C.A.
Hackett Th.
Amer. Th.
Seventh Avenue
N.Y. & N.J. Tunnel Terminal
Metropol. Opera Ho.
Broadway
Sixth Avenue
N.Y. Herald
New Amst. Th.
Mas. T.
Garrick Th.
Bryant Park
N.Y. Public Library
Acad. of Medicine
Vanderbilt Ho.
Madison Sq.
Transfiguration Ch.
Madison Avenue
St. Barth. Ch.
St. Patrick's Cathedral
Appellate Ct.
Grand Central Station
Armory
Lexington Avenue
Hospt. Crippl.
Cit. Coll.
Cond Avenue
First Avenue
Bellevue Hospital
The Morgue
Blackwell's Island Ferry
To Brooklyn
To Williamsburg
Hunter's Point & James Slip Ferry
Penna. & Long Isl. R.R. Tunnels
Hunter's Point & 34th St. Ferry
Bellmont Tunnel
Charity Hosp.
Penitentiary
HUNTER'S POINT
Depots
Newtown Creek
LONG ISL
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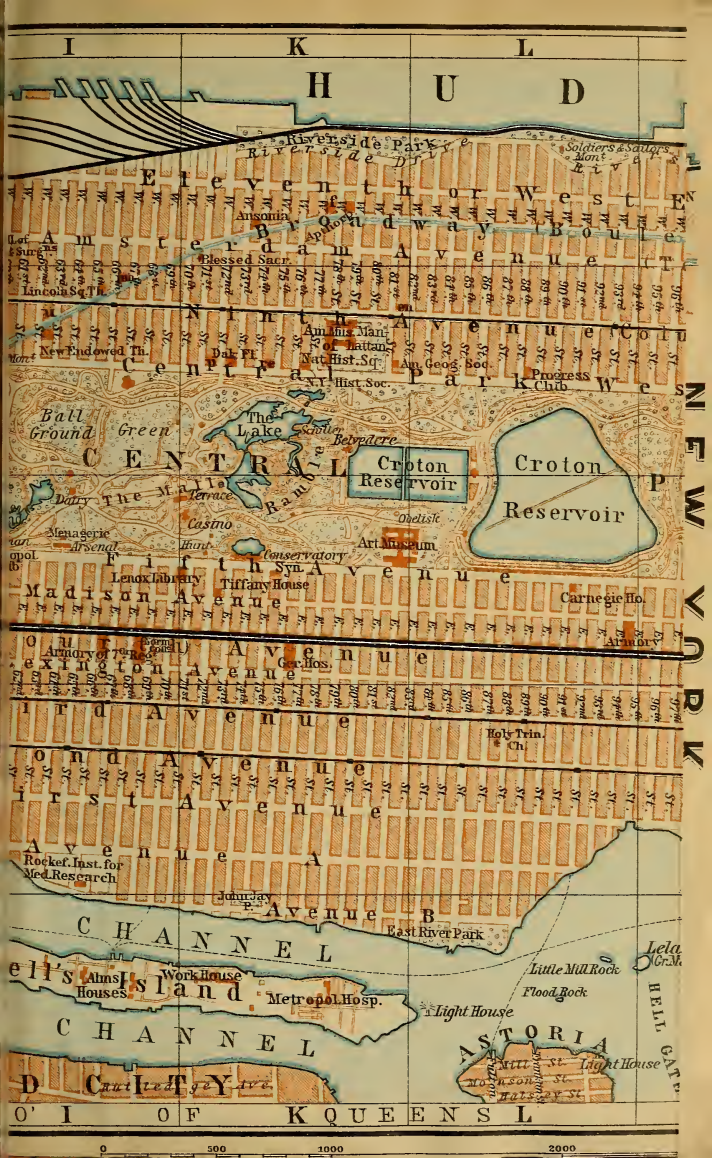
Feet



I K L
H U D
Riverside Park
Riverside Drive
Soldiers & Sailors Mon't
Eleventh or West E
Broadway Boule
Amsterdam Avenue
Ansonia
Blessed Sacr.
Lincoln Sq. Th.
Ninth Avenue
Am. Mus. Man. of Hattan
Nat. Hist. Sq.
Am. Geog. Soc.
New Endowed Th.
Dak. Pl.
Central Park West
N.Y. Hist. Soc.
Progress Club
Ball Ground
Green
The Lake
Belvedere
CENTRAL
Croton Reservoir
Croton Reservoir
Dairy
The Mall
Terrace
Casino
Obelisk
Menagerie
Arsenal
Hunt
Art Museum
Conservatory
Fifth Avenue
Lenox Library
Tiffany House
Madison Avenue
Carnegie Ho.
Armory
Armory of 7th Reg.
Ger. Hos.
Lexington Avenue
Third Avenue
Holy Trin. Ch.
Second Avenue
First Avenue
Avenue A
Rockef. Inst. for Med. Research
John Jay P.
Avenue B
East River Park
CHANNEL
Alms Houses
Work House
Island
Metropol. Hosp.
Little Mill Rock
Flood Rock
Light House
CHANNEL
ASTORIA
Light House
HELL GATE
Mill St.
Monson St.
Halsey St.
Hutledge Ave.
O'I OF KQUEENSL
NEW YORK
0
500
1000
2000

(Pl. F, 1), used also by the Baltimore & Ohio, the Long Branch, and the Philadelphia & Reading Railroads.

For *Brooklyn* stations, see p. 74; for *Long Island* stations, see p. 78.

Steamers. 1. OCEAN STEAMSHIPS. The following is a list of the chief Passenger Steamship Lines between New York and Europe, with their docks, city-offices, and days of sailing (comp. R. 1 and p. xv). *Cunard Line*, Piers 51 & 52, North River, foot of Jane St. (Pl. D, F. 1; office. 21 State St.; Wed. & Sat.; to Gibraltar, Genoa, and Naples fortnightly); *White Star Line*, Pier 48, at foot of W. 11th St. (Pl. D, 1; office, 9 Broadway; Wed. & Thurs.; to Mediterranean ports once or twice a month); *American Line (International Mercantile Marine Co.)*, Pier 15, foot of Vesey St. (Pl. B, 2; office, 9 Broadway; Sat.); *Holland-America Line*, foot of 5th St., Hoboken (Pl. D, 1; office, 39 Broadway; to Boulogne and Rotterdam on Tues.); *Anchor Line*, Dock 54, foot of W. 24th St. (Pl. F, 1; office, 17 Broadway; Sat.); *Compagnie Générale Transatlantique (French Line)*, Pier 42, Morton St. (Pl. D, 1; office, 19 State St; Thurs.); *North German Lloyd*, foot of 2nd, 3rd, and 4th Sts., Hoboken (Pl. D, 1; office, 5 Broadway; Tues. & Thurs.; to Gibraltar, Genoa, and Naples weekly); *Hamburg-American Line*, foot of Newark St. and 1st St., Hoboken (Pl. D, C, 1; office, 37 Broadway; Sat., Thurs., & Tues.; to Genoa and Naples weekly); *Red Star Line (International Mercantile Marine Co.)*, Pier 14, foot of Fulton St. (Pl. B, 2; office, 9 Broadway; Sat. or Wed.); *Atlantic Transport*, Piers 39 & 40, foot of W. Houston and Clarkson Sts. (Pl. D, C, 1; office, 9 Broadway; Sat.); *Italian Royal Mail Line*, for Genoa and Naples, Pier 74, foot of W. 34th St. (Pl. G, 1; office, 50 Wall St.; Wed.; also fortnightly to the W. Indies); *Scandinavian-American Line*, foot of 17th St., Hoboken (office, 1 Broadway; Thurs.). — Other ocean-going steamships ply to the ports of S. and Central America, the West Indies, Mexico, Cuba, Porto Rico, Florida, New Orleans, Richmond, and other ports of the Southern States, the Mediterranean ports, Fiume, Boston, Philadelphia, Portland (Maine), Newfoundland, etc. — The times of departure and other information are advertised in the daily papers.

2. RIVER, SOUND, AND HARBOUR STEAMERS. The following are a few of the principal points on the Hudson, Long Island Sound, and N. Y. Harbour, reached by steamer from New York. For full information on these and other lines, reference must be made to current time-tables (*e.g.* in Bullinger, see p. 28) and daily papers. The larger American river steamboats are very finely fitted up, and the traveller should not omit an inspection of one of the Fall River or Hudson River boats, even if he does not travel by them. They are very unlike European boats, rising in house-like tiers high above the water, and propelled by paddle-wheels and (often) 'walking-beam' engines, the long shafts of which protrude above the middle of the deck. The 'smoke-stacks' or funnels are also unlike the European pattern. There are good restaurants on board, and a comfortable private stateroom (2-3 berths) may be obtained for a small addition to the regular fare (usually $ 1-2 per night; large rooms with brass bedsteads $ 5). The Hudson River boats cease running in winter, but most of the Sound boats ply throughout the year. — To *Albany* (p. 91), either by the Hudson River Day Line or the People's Line (fares. etc., see p. 81). — To *Catskill* (p. 98) and *Hudson* (p. 88), either by the Hudson River Day Line (see above; $ 1½; 6¾ hrs.) or by the Catskill Evening Line from the foot of Christopher St. ($ 1¼; night-boat, 11 hrs.). — To *Rondout* (p. 90), by the Day Line (see above) or by the 'Mary Powell' (Desbrosses St.; 90 c). — To *Troy* (p. 128), by the Citizen's Line ($ 1½, round trip $ 2½; 12 hrs.). — To *West Point* (p. 89), by the Day Line (see above; 75 c.; 3¼ hrs.) or by the 'Mary Powell' (see above; same fare; 3 hrs.). — To *Boston* (p. 253), by the Metropolitan Line (15 hrs.; $ 3.65; p. 246) or by the Fall River, Providence, or Norwich line (fare from $ 2.65 to $ 3.65 acc. to the season; 12½-14½ hrs.; for all details, see p. 246). — To *Coney Island* (p. 79), from W. 22nd St., from Pier 10 (foot of Cedar St.), and from W. 129th St., hourly or oftener in summer (fare 15 c.; 50 min.). — To *Long Branch* (p. 178), from Pier 8, North River, thrice daily in summer (35 c.). — To *Providence*, *Newport*, *Fall River*, and *New London*, see R. 30d (p. 246). — *Ferries*, see p. 19.

b. Hotels, Restaurants, etc.

Hotels † (comp. p. xxii). The distinction between the four geographical groups in which the hotels of New York are here distributed is a somewhat arbitrary one, but it will perhaps give the traveller some help in selecting his quarters. As a general rule those who wish to be near the business-districts should select a 'Down Town' hotel, or at any rate, one not higher up than 14th St., while the ordinary tourist will probably find himself best suited between Madison Square and Central Park. For the difference between the 'American' and 'European' plans, see p. xxiii.

Down Town (from the Battery to Canal St.). On the European Plan: *Astor House (Pl. a h, B 3; *I*), 225 Broadway, opposite the Post Office, an old and popular house, much frequented by business-men, R. from $ 1½; Cosmopolitan, 127 Chambers St. (Pl. B, 3; *I*), R. from $ 1; Smith & McNell's, 195 Washington St. (Pl. B, 2), R. from 50 c.

Between Canal St. and 14th St. 1. European Plan: Lafayette-Brevoort House (Pl. l b; D, E, 3), at the corner of Fifth Ave. and Clinton Place, R. from $ 2; St. Denis (Pl. s d; E, 3), cor. of Broadway and 11th St., good cuisine, R. from $ 1; Hôtel Lafayette (Pl. l, E 3; French), 17 University Place, cor. 9th St., with excellent cuisine, R. from $ 1; Albert (Pl. m; E, 3), 75 University Place, cor. of E. 11th St., R. from $ 1. — 2. American and European: Broadway Central (Pl. b c; D, 3), 667 Broadway (1000 beds), from $ 2½, R. from $ 1.

From 14th St. to 26th St. (incl. *Union Sq.* and *Madison Sq.*). — 1. European Plan: Hoffman House (Pl. n, F 3; *II*), Madison Sq., cor. of 25th St., much frequented by Democratic politicians. R. from $ 2; The Chelsea (Pl. c h, F 2; *II*), 222 W. 23rd St., R. from $ 1½, with bath from $ 2, comfortable and conveniently situated; Albemarle (Pl. v, F 3; *II*), cor. Broadway and 24th St., Madison Sq., R. $ 2½, good cuisine; Westminster (Pl. s, E 3; *II*), Irving Place, cor. 16th St., frequented by Spaniards, R. from $ 1; New Amsterdam, Fourth Ave., cor. 21st St., R. from $ 1; Margaret Louisa Home (Pl. m l, E 3; *II*), 14 W. 16th St., practically a moderate-priced hotel for business-women (see p. 46; previous application advisable). — 2. American and European Plan: Ashland (Pl. t, F 3; *II*), 315 Fourth Ave., cor. 24th St., commercial, $ 2½-3, R. $ 1.

Above Madison Square. 1. European Plan: *Waldorf-Astoria (Pl. a, G 3; *II*), at the cor. of Fifth Ave. and 34th St. (comp. p. 47), R. from $ 2½; *St. Regis (Pl. s r, H 3; *II*), Fifth Ave., cor. of 55th St., with 450 rooms and a fine library of 2000 vols., R. with bath from $ 4; *Hotel Astor (Pl. r, G 2; *II*), Times Square (p. 45), cor. of Seventh Ave. & 44th St., R. from $ 2½, with bath from $ 3½ (700 rooms); Knickerbocker (Pl. k, G 2; *II*), Broadway, cor. of 42nd St., R. from $ 2, with bath from $ 3 (600 rooms); New Plaza (Pl. n p, I 3; *II*), at the cor. of Fifth Ave. and 59th St., adjoining Central Park, R. from $ 2½, with bath from $ 4 (760 rooms); *Gotham (Pl. g, H 3; *II*), Fifth Ave., opposite the St. Regis (see above), R. with bath from $ 2, for two from $ 3. These six are huge and fashionable houses of the highest class, sumptuously equipped and decorated, with large ball-rooms, winter-gardens, roof-gardens, and so on. — *Holland House (Pl. q, F 3; *II*), Fifth Ave., cor. 30th St., somewhat smaller and quieter than the above, R. from $ 2; *Savoy (Pl. s a, I 3; *II*), *Netherland (Pl. n e, I 3; *II*), both opposite the New Plaza (see above), R. from $ 2; Belmont (Pl. b, G 3; *II*), 42nd St. (27 stories; 700 rooms), R. from $ 2, with bath from $ 3; Murray

† Strangers who do not put up at any of the largest and most gorgeous hostelries of New York should at least visit one of them to obtain an idea of their lavish decorations and elaborate contrivances for convenience and comfort. A courteous application to see over the hotel is seldom refused, even if no meal has been taken in the house. Among the most notable houses are the Waldorf-Astoria (mural paintings by Blashfield and other American artists), the Hotel Astor (largest kitchen in the world), the New Plaza, the Knickerbocker, the St. Regis (mural decorations by R. V. V. Sewell and Flemish tapestry), the Gotham, and the Manhattan (mural paintings by C. Y. Turner). Afternoon tea may be obtained at most of these for 25-50 c.

Hill (Pl. m b, G 3; *II*), Park Ave., between 40th and 41st Sts., R. from $ 2, these two near the Grand Central Station; Imperial (Pl. z, F 3; *II*), Broadway, cor. 32nd St., a large and handsomely decorated house, R. from $ 2; Majestic (Pl. p, K 2; roof-garden), Eighth Ave., cor. 72nd St., facing Central Park, R. from $ 2½; Earlington (Pl. x, F 2, 3; *II*), 49 W. 27th St., R. from $ 1½; Victoria (Pl. c, F 3; *II*), Fifth Ave., cor. 27th St., R. $ 2; Algonquin, W. 44th St., R. with bath from $ 2; Navarre (Pl. o, G 2; *II*), Seventh Ave., cor. 38th St., R. $ 1½; Gerard (Pl. ge, G 3; *II*), W. 44th St., R. from $ 1½, suite from $ 3; Buckingham (Pl. b u, H 3; *II*), a large family hotel, Fifth Ave., cor. 50th St., R. from $ 2; New Weston, Madison Ave., cor. 49th St., R. with bath from $ 3; Webster (Pl. w e, G 3; *II*), 40 W. 45th St., R. from $ 2; Seville (Pl. s e, F 3; *II*), Madison Ave., cor. 29th St., R. from $ 1½; Pierrepont, W. 32nd St., near Broadway, R. with bath from $ 2½; Latham, Fifth Ave., near 28th St., R. from $ 1½; *Prince George (Pl. p g, F 3; *II*), 27th St., between Fifth Ave. and Madison Ave., suitable for ladies, R. with bath from $ 2; Stratford House, 11 E. 32nd St.; Flanders, 135 W. 45th St., R. with bath from $ 2½; Roland, 56 E. 59th St., R. from $ 1, with bath $ 1½. The following hotels are all in Broadway: New Grand (Pl. n g, F 3; *II*), cor. 31st St., R. from $ 1½; Marie Antoinette (Pl. m a; I, 2), cor. 66th St.; Belleclaire (Pl. f; K, 1), cor. 77th St., R. $ 2; Herald Square (Pl. i, G 2; *II*), cor. 34th St., R. $ 1½, well spoken of; Woodward (Pl. w, H 2; *II*), cor. 55th St., R. $ 2, with bath $ 2½-3; Cadillac (Pl. c a, G 2; *II*), cor. 43rd St., commercial, R. from $ 1½; Cumberland (Pl. c u, H 2; *II*), cor. 54th St., R. with bath from $ 2½; King Edward (Pl. k e, H 2; *II*), 47th St., R. from $ 1½; Breslin (Pl. b r, F 3; *II*), cor. 29th St., R. from $ 1½; Empire (Pl. u; I, 2), cor. 63rd St., R. from $ 1½; Marseille (Pl. m r; M, 1), cor. 103rd St., R. from $ 1½; Albany, cor. 41st St., R. from $ 1½; Martinique, cor. 33rd St., good cuisine, R. from $ 2; Normandie (Pl. n o, G 2; *II*), Gilsey Ho., cor. 29th St. (Pl. F, 3; *II*), R. from $ 1; Marlborough (Pl. y, G 2; *II*), cor. 36th St., R. from $ 1½; Sherman Square, cor. 71st St., R. from $ 1½. New Florence, Fourth Ave., cor. 18th St.. R. from $ 1½; Clarendon (the hotel at which Thackeray stayed), opposite the last, old-fashioned but comfortable, R. from $ 1; Park Avenue (Pl. p a, F 3; *II*), Fourth Ave., cor. 32nd St.. R. from $ 1½; Manhattan (Pl. e, G 3; *II*), Madison Ave., cor. 42nd St., near Grand Central Station, R. from $ 2; Grand Union (Pl. gu, G 3; *II*), 42nd St., opposite the Grand Central Station, R. from $ 1; Grenoble (Pl. d, H 2; *II*), Seventh Ave., cor. 56th St., R. from $ 1½; St. Andrew, 201 W. 72nd St., cor. of the Boulevard and near the beginning of Riverside Drive (Pl. K, 1), R. from $ 2, well spoken of; Endicott (Pl. e n; K, L, 2), Ninth Ave., cor. 81st St., R. from $ 1½, with bath from $ 2½ (back-room desirable); Winthrop, 2088 Seventh Ave. (Harlem), R. $ 1½. — Martha Washington Hotel (Pl. mw, F 3; *II*), 29 E. 29th St., for women only, R. from $ 1½, with restaurant (open to men), tea-room, and several shops for ladies' needs (rooms should be ordered in advance).

2. American and European Plan: San Remo (Pl. re; K, 2), Eighth Ave., cor. 74th St., facing Central Park, from $ 3½, R. from $ 1½; Bristol, W. 49th St., between Broadway and Sixth Ave., from $ 3, R. from $ 2.

Most of the hotels take in guests by the week or month at very considerable reductions of their daily rates (comp. p. xxiii); and when two persons occupy one room the charge is often materially diminished. Many of the uptown hotels are almost entirely occupied by permanent guests and are little used by tourists. Fees to waiters and bell-boys are usual.

Boarding Houses. Good board can be procured in New York from $ 8 a week upwards, varying according to the situation and character of the house. For $ 15-20 one should obtain good accommodation in the best neighbourhood (*e.g.* near Madison Sq.). Above Washington Square and between Seventh and Lexington Avenues boarding-houses may be found in every block. Many are in E. 21st St., Gramercy Park, Irving Place, and Madison Ave., while immense numbers can be found on the W. side by a little search (vacancies indicated by slips of paper near the door-bell) or a carefully worded advertisement. Good and cheaper boarding-houses may

also be found in Henry St. and the contiguous parts of Brooklyn (p. 74), near the bridge and ferries. A distinct understanding should be come to beforehand, and references should be asked for in houses not specially recommended. Light, heat, service (but not boot-cleaning), and the use of a bath should be included in the price for board.

Furnished Rooms may be obtained in convenient quarters from $ 4 or $ 5 per week upwards, and breakfast is sometimes provided in the same house. But the English custom of living in lodgings, ordering one's own meals, and having them cooked and served by the landlady is practically unknown in New York.

Restaurants. The distinction made below between *à la carte* and *table-d'hôte* restaurants is not necessarily mutually exclusive, but indicates the general custom at the different houses. At all the high-priced *à la carte* restaurants one portion (except of oysters or desert) is generally enough for two persons, and two portions are abundant for three. Some of the *table-d'hôte* dinners are good for the prices charged, but the *à la carte* restaurants are usually dear for a person dining alone. The following list divides the restaurants into two groups, above and below 14th St. It is customary to give a fee to the waiter, varying from 5 c. or 10 c. in the cheaper restaurants to 25 c. or more in the best. Wine (generally poor and dear, except at the foreign restaurants) and beer (5-10 c. per glass, 10-20 c. per pint) may be usually obtained, but are by no means so universally ordered as in Europe. Ladies without escort are not admitted to the best restaurants in the evening.

Up Town Restaurants (above 14th St.). 1. A la carte. **Delmonico's* (Pl. G, 3; *II*), N.E. cor. Fifth Ave. and 44th St. (formerly in Madison Sq.), a famous house, with high charges; public and private rooms, café, ball rooms, etc.; crowded about 7-8 p.m. and after the theatres. **Sherry's* (Pl. G, 3; *II*), a similar establishment at the S.W. cor. of the same streets, with a very fashionable patronage. Restaurants at the **Waldorf-Astoria* (fine roof-garden restaurant open in summer), **Holland Ho.*, **St. Regis*, **Hotel Astor* (orangery, roof-garden, Indian grill-room; prices reasonable), *New Plaza*, *Netherland*, *Savoy*, *Majestic*, *Manhattan*, *Hoffman Ho.* (roof-garden), *Albemarle*, *Park Avenue* (court-garden), *Gilsey Ho.*, *Grand Union* (Flemish Room), *Breslin*, *Imperial*, *Ashland* (good plain cooking), and other hotels on the European plan, see above; **Hofbräuhaus*, Broadway & 30th St. (quaintly fitted up in the old-German style); *Manhattan Square Hotel*, 77th St., close to Museum of Nat. History (p. 56); *Dorlon*, 6 E. 23rd St. (Madison Sq.), famous for oysters and fish; *Shanley*, Broadway, between 29th & 30th Sts.; *Burns*, 785 Sixth Ave. and 102 W. 45th St.; *O'Neill*, 358 Sixth Avenue, cor. 22nd St., less fashionable and expensive; *Mouquin*, 454 Sixth Avenue, frequented by artists, authors, etc.; *Café des Beaux-Arts*, 80 W. 40th St.; *Jack's*, 761 Sixth Ave. (above 43rd St.; good American cookery), and Columbus Ave., cor. 74th St. (noted for shellfish and game); *Pabst*, Eighth Ave., cor. 58th St., frequented after theatre, first-class prices; *Rector's*, 1510 Broadway, also a supper-resort; *Goerwitz*, Third Ave., cor. 19th St., a quaint German beer-saloon; **Halloran's*, 213 Sixth Ave, moderate; *Browne's Chop House*, 1424 Broadway, between 39th and 40th Sts. (good cuisine and interesting dramatic pictures; men only); *Engel's Chop House*, 61 W. 36th St.; *Keen's Chop House*, 70 W. 36th St. (men); *Cavanagh's Oyster & Chop House*, 258 W. 23rd St.; *Claremont Hotel* (Pl. O, 1), near Grant's Monument, see p. 68; *Terrace Garden*, E. 59th St., near Lexington Ave.; **Childs' Dairy Restaurants*, all over town, moderate prices; **Dennett's Luncheon Rooms*, moderate. — 2. Table-d'hôte Restaurants (D. usually from 5 or 6 to 8 or 9). *Flouret (Hôt. de Logerot)*, 128 Fifth Ave., cor. 18th St., well spoken of, D. 1¼, with wine $ 1½; *Café Martin* (Pl. F, 3; *II*). Fifth Ave., cor. 26th St., D. $ 1¼ ($ 1½ on Sat., Sun., & holidays); **Martinique*, Broadway & 33rd St. (B. 60 c., D. $ 1½); **Café des Ambassadeurs*, 108 W. 38th St., D. $ 1¼; *Murray Hill Hotel Restaurant* (see pp. 12, 13), D. 75 c. (dearer in dining-room of hotel); *The Chelsea* (p. 12), D. $ 1; *Park Avenue Hotel* (p. 13), D. 75 c.; *Café Francis*, 57 W. 35th St., D. $ 1; *Café de la Paix*, 39 W. 31st St., D. $ 1¼; *Purssell*, 910 Broadway, D. $ 1; *Westminster Hotel* (p. 12), L. 50 c.,

D. $1; *Roversi Hotel*, 29 W. 27th St., L. 30 c., D. with wine 60 c.; **Gazzo*, Metropolitan Opera House building, D. $1 (if no drinks are ordered, $1½).

Down Town Restaurants. 1. A la carte. **Café Savarin*, in the Equitable Building (p. 36), 120 Broadway, finely fitted up, high charges; **Lafayette-Brevoort House*, see p. 12; **Fleischmann's*, Broadway, cor. 11th St.; *Eyrie Restaurant*, on the 23rd story of the Tract Society Building, 150 Nassau St. (p. 39); *Garret Restaurant*, on the 23rd story of the West Street Building (comp. p. 3; fine views from these two); **Hacan*, Park Row Building (p. 38); *Lüchow* (German), 108 E. 14th St.; *Little Hungary*, 257 E. Houston St. (Hungarian wines); *Delmonico*, 2 S. William St.; **Astor House* (p. 12), a much-frequented restaurant (2000-2500 luncheons served daily), with luncheon-counters, etc.; **Mouquin*, 20 Ann St.; *Smith & McNell*, 197 Washington St., moderate; *Dewey*, 138 Fulton St. (American wines); *Childs'* and *Dennett's Restaurants*, see p. 14; **Farrish's Chop House (Hickey)*, 64 John St.; *Gonfarone*, cor. of 8th & McDougall Sts. — 2. Tables-d'hôte. **Lafayette-Brevoort House*, see p. 12, D. $1¼; *Fraunces Tavern* (p. 34), cor. of Broad & Pearl Sts., D. $1; **St. Denis Hotel* (*Taylor's Restaurant*; native wines), see p. 12 (B. 50 c., D. $1¼); *Café Boulevard*. Second Ave., cor. 10th St., with Hungarian orchestra, D. 60 c., on Sat. & Sun. 75 c., wine extra; *Broadway Central Hotel* (p. 12), D. on Sun. (5.30-8) 75 c.

Among the places frequented by ladies may be mentioned *Purssell's*, the *St. Denis Hotel*, and the *Lafayette-Brevoort House*, see above; *Childs'* and *Dennett's Luncheon Rooms; The Fernery*, 14 W. 33rd St., opposite the Waldorf-Astoria, well spoken of; *Colonia*, 20 W. 33rd St.; *Gift Shop Tea Rooms*, in the building of the Women's Municipal League (p. 24); the restaurants at *Macy's* (p. 44) and other large department stores; the *Women's Exchange*, 334 Madison Ave.

Oyster Saloons (comp. p. xxiv). **Dorlon*, 6 E. 23rd St. (Madison Sq.); *O'Neill*, see p. 14; *Silsbee*, Sixth Ave., near 14th St.; *Libby*, 143 Fulton St.; also at nearly all other restaurants and at the *Markets*.

The *Hotel Bars* are a characteristic American feature, which may be studied to perfection in New York. Good bars at most of the leading hotels; *Stewart's*, 8 Warren St., with good pictures (shown to ladies, 8-11 a.m.).

Confectioners. *Maillard*, 1097 Broadway; *Huyler*, 150 and 863 Broadway, 508 Fifth Ave., and 21 W. 42nd St., also famous for 'ice cream soda' and other refreshing summer-drinks; *Brummell*, 831 & 1288 Broadway, 28 E. 23rd St., etc.; *Repetti*, Broadway, cor. of 42nd St., and 451 Fifth Ave.; *Purssell's*, see p. 14; *Macy*, 34th St., in Herald Square; *Allegretti*, 927 Broadway. — Soda-water flavoured with syrups of various kinds, 'ice-cream sodas', egg and other 'phosphates', and other non-alcoholic beverages are very popular and may be procured at all confectioners and drug-stores (prices from 5 c. upwards). The 'Soda Fountain' at the drug-store is, indeed, a prominent American institution.

c. City Railroads. Tramways. Post Office, etc.

Elevated Railroads (all lines leased to Interborough Rapid Transit Co., 13-21 Park Row). A large portion of the passenger traffic in New York is carried on by the four *Elevated Railroads*, which now carry fully 250 million passengers annually. All are now operated by electricity. There are two lines on the E. side of the city (Second and Third Avenues), and two on the W. (Sixth and Ninth Avenues). The most frequented is the Third Avenue line, next to which comes the Sixth Avenue; but all are disagreeably crowded at business-hours (first and last cars often less so than those in the middle). Apart from this, the 'L', as it is popularly called, affords a very pleasant mode of conveyance. The track may be described as a continuous viaduct or bridge, supported on iron columns. The general height is about on a level with the first-floor windows of the houses, but at places it is much higher than this, the Ninth Avenue line attaining an elevation of 65 ft. at 110th St., where it forms a bold curve in passing from Ninth to Eighth Avenue. The stations occur about every five blocks in the lower quarters, and are nowhere more than ½ M.

apart. Passengers ascend from the street by the staircases to the right (looking in the direction in which they wish to travel), buy a ticket at the ticket-office, and drop it into the 'chopper-box' at the entrance to the platform. The uniform fare, for any distance, is 5 c.; children under five, free. Extra 3-cent tickets are issued for transfer to certain 'surface-lines'; these, of course, are not dropped in the chopper-box but are given up to the conductor on the line to which transfer is made. The trains run at intervals of a few minutes during the day, and during the business-hours morning and evening follow each other with hardly an intermission. Express-trains, stopping at a few stations only, run on the Third and Ninth Avenue lines during the busiest hours (down town in the morning, up town in the afternoon). The Second Avenue trains cease running at midnight, but the trains on the other lines run all night, at intervals of 10 minutes. The trains run on all lines on Sunday, at somewhat less frequent intervals. All four lines start from South Ferry, adjoining the Barge Office (p. 33). They vary in length from 10 M. to 13¾ M. Short branches run from the Third Avenue Line to the City Hall, the 34th St. Ferry (these two also from Second Ave.), and the Grand Central Depot. Passengers should ascertain whether or not they change cars at the busy Chatham Sq. station, where the Second and Third Avenue lines connect. The Sixth Avenue line proper ends at Central Park (58th St.), but a branch diverges to Ninth Avenue at 53rd St., and about three-fourths of the trains ('Harlem trains'; green signals and lamps) follow this route. The Ninth Avenue Line ends at the Harlem River (see Plan), where it connects with the *Putnam Division of the N. Y. C. & H. R. R. R.* for High Bridge (p. 70) and points in Westchester County. The Second and Third Avenue lines are continued by a line crossing the Harlem River and extending to Bronx Park. The name of the station is announced by the guard on arrival, and the name of the 'next station' on leaving the station. The names are always placarded at the stations, of which the following is a list.

2nd Ave. — South Ferry, Hanover Sq., Fulton St., Franklin Sq., Chatham Sq. (change cars for City Hall), Canal St., Grand St., Rivington St., 1st, 8th, 14th, 19th, 23rd, 34th (change cars for Hunter's Point), 42nd, 50th, 57th, 65th, 72nd, 80th, 86th, 92nd, 99th, 111th, 117th, 121st, 127th, 129th Sts. Passengers change at 129th St. to Third Ave. line for points to the N.

3rd Ave. — South Ferry, Hanover Sq., Fulton St., Franklin Sq., Chatham Sq. (change cars for City Hall), Canal St., Grand St., Houston St., 9th, 14th, 18th, 23rd, 28th, 34th (change cars for Hunter's Point), 42nd (change cars for Grand Central Station), 47th, 53rd, 59th, 67th, 76th, 84th, 89th, 99th, 106th, 116th, 125th, 129th, 133rd, 138th, 143rd, 149th, 156th, 161st, 166th, 169th Sts., Wendover Ave., 174th, 177th, 183rd Sts., Pelham Avenue, and Bronx Park.

6th Ave. — South Ferry, Battery Place, Rector St., Cortlandt St., Park Pl., Chambers St., Franklin St., Grand St., Bleecker St., 9th, 14th, 18th, 23rd (with moving staircase), 28th, 33rd, 42nd, 50th (change cars for 58th St. & Sixth Ave.), 8th Ave. & 53rd, 59th, 66th, 72nd, 81st, 93rd, 104th, 110th, 116th, 125th, 130th, 135th, 140th, 145th, 155th Sts. (stations from 59th to 104th are on Ninth Ave., 116th to 155th on Eighth Ave.).

9th Ave. — South Ferry, Battery Place, Rector St., Cortlandt St., Barclay St., Warren St., Franklin St., Desbrosses St., Houston St., Christopher St., 14th, 23rd, 30th, 34th, 42nd, 50th, 59th, 66th, 72nd, 81st, 93rd, 104th, 110th, 116th, 125th, 130th, 135th, 140th, 145th, 155th Sts.

Brooklyn Bridge Railway. Trains of six or seven cars, propelled by electricity or by an endless cable, cross the Brooklyn Bridge (see p. 40) in 6 min., running at intervals of about 45 seconds. All of them continue in Brooklyn over the Elevated Railroads to various parts of the city (fare 5 c.). At the New York end the platforms communicate directly with the City Hall branch of the Third Avenue Elevated. Comp. p. 74. — *Electric Tramways* over Brooklyn Bridge, see p. 40.

Rapid Transit Railroad or New York Subway (*Interborough Rapid Transit Co.*, 13-21 Park Row). This underground electric railroad was opened for traffic in 1904 and has since been extended to Brooklyn. Including the Brooklyn tunnel (opened in 1908), it is 25 M. in total length, 19½ M.

of this being under ground or under water (12¼ M. shallow subway, 7¼ M. tunnel proper). Within Manhattan it extends from South Ferry (Battery Park) to (15 M.) *Kingsbridge*, Spuyten Duyvil Creek, on the W. side of the city, and to (14½ M.) *Bronx Park* on the E. side. The Brooklyn extension begins at the Bowling Green, passes under the East River by tunnel (two parallel tubes, 1¼ M. long), and runs through Brooklyn to Borough Hall (p. 75) and (3 M.) Atlantic Ave. (farther extensions in progress). From South Ferry the Manhattan line runs under Broadway to City Hall Park, bends here to the right (E.; loop to City Hall Station), then runs to the N. up Lafayette St. and Fourth Ave. to 42nd St., crosses under 42nd St. to the W. side, and continues up Broadway, N.W. and due N., to 103rd St. Here it forks, the W. branch continuing almost due N. to *Kingsbridge*, while the E. branch follows Lenox Ave. to the N. to 143rd St. and then runs in a N.E. direction to *West Farms* and *Bronx Park* (comp. General Plan).

At 125th St. the W. Side line crosses Manhattan Valley on a viaduct to 135th St. and then again enters a tunnel. At 167th and 181st Sts. the stations are hollowed out of the solid rock, 110 ft. underground, and are reached by elevators. At Fort George the viaduct again appears, and finishes the route. The latter part of the E. Side line, from Westchester Ave. to Bronx Park, is also elevated.

The Subway is rectangular in section, with concrete bed and steel-frame construction; it is 13 ft. high, and varies in width from 25 ft. (two tracks) to 50 ft. (four tracks). The Brooklyn tube-tunnels are 15½ ft. in diameter; the lowest point is 94 ft. below mean high water. The cost of the Manhattan line was nearly $ 50,000,000 (10,000,000*l.*); that of the Brooklyn extension about $ 10,000,000 more.

The running-time from South Ferry to 96th St. is 21 min. for express trains, and 31 min. for local trains. Between Bowling Green and Atlantic Ave., Brooklyn, the running-time is 8 minutes. Uniform fare, 5 c. Below 96th St. the express trains stop only at Bowling Green, Wall St., Fulton St., Brooklyn Bridge, 14th St., Grand Central, and 72nd St. The through Brooklyn trains (from Bowling Green on) call at express stations only (marked below with an asterisk). The down-town terminus of the local trains is at City Hall Park, reached by a loop from Brooklyn Bridge station.

Stations: Atlantic Ave., Nevins St., Hoyt St., Borough Hall (these four in Brooklyn), *South Ferry, *Bowling Green, *Wall St., *Fulton St., *Brooklyn Bridge, City Hall Park, Worth St., Canal St., Spring St., Bleecker St., Astor Place, *14th, 18th, 23rd, 28th, & 33rd Sts., *42nd St. & Park Ave. (Grand Central Depot), 42nd St. & Broadway (Times Sq.), 50th St., 60th St. (Columbus Circle), 66th, *72nd, 79th, 86th, 91st, and *96th Sts. Beyond 96th St. the E. side and W. side trains diverge from each other. West Side Stations ('Broadway Express'): 103rd St., 110th St. (Cathedral Parkway), 116th St. (Columbia Univ.), Manhattan St., 137th, 145th, 157th, 168th, & 181st Sts., Dyckman St., 207th, 215th, 225th, 231st, 238th, 242nd Sts. (Bailey Ave., Kingsbridge). East Side Stations ('Lenox Ave. & West Farms Express'): 110th, 116th, 125th, & 135th Sts. From 135th St. some trains run merely to a terminal station at 145th St., while others run viâ 149th St. & Mott Ave., 149th St. & Third Ave., Jackson Ave., Prospect Ave., Simpson St., Freeman St., 174th St., and 177th St., to 180th St. (West Farms and Bronx Park).

RiverTunnels. Besides the above-mentioned Brooklyn Subway, New York (*i.e.* Manhattan) is also connected with New Jersey and Long Island City by other submarine tunnels. Those completed, or approaching completion, will be found mentioned at pp. 37, 54, & 78. The only one in actual use, however, when this Handbook went to press, was the double tunnel between Morton St. and Hoboken (comp. p. 37). By this route trains of electric cars run every few minutes from the station at the corner of *Sixth Avenue & 19th Street* (Pl. E, 2; *II*) to (3 M.) **Hoboken**, taking 12 min. to the journey (fare 5 c.). The trains also stop in New York at *Ninth Street* (Pl. E, 2), *14th Street* (Pl. E, 2), and *Christopher Street* (Pl. D, E, 2; hence to Hoboken 7 min.). The terminus at Hoboken adjoins the Delaware &

Lackawanna Railway Station (p. 10). The service through the Cortlandt Street tunnels (p. 37) will be similar.

Tramways. Nearly all the avenues running N. and S. and most of the important cross-streets are traversed by *Tramways* (*Street Cars*, *Surface Cars*), most of which are now operated by electricity ('underground trolley system'). A few of the cross-town cars are still drawn by horses. Uniform fare for any distance, 5 c. About 500 million passengers are carried annually, and overcrowding is nearly as constant, especially on the Broadway cars, as on the Elevated Railroad. Transfer tickets are usually furnished without extra charge for the cross-lines. The cars nominally stop only at the upper crossings going up and at the lower crossings going down town. All lines run every few minutes, and most of them run all night. As the exact routes of the cars are subject to frequent changes, it may be enough here to note that among the most important lines are the following: Broadway, Third, Fourth, Madison, Sixth, and Eighth Avenues; West Side Belt Line (Tenth Ave.), passing all the N. River ferries; East Side Belt Line (First Ave.), passing all the E. River ferries; and the Cross-town lines on 14th, 23rd, 34th, and 42nd Sts. On the Fourth & Madison Ave. line passengers board the cars at the rear only and pay as they enter. A blue light indicates cars between Brooklyn Bridge and 135th St., a yellow light those between Canal or Broome St. and 116th St., a green light those between Astor Place and 86th St. A red light signifies that the car is not carrying passengers. — The new *Loop Subway*, connecting the Manhattan ends of Brooklyn, Manhattan, and Williamsburg bridges, will be traversed by electric cars, greatly facilitating intercourse with Long Island points. — For electric lines to *Brooklyn*, see p. 74; to *Long Island City*, see p. 78; to *Jersey City*, see p. 37.

Motor Omnibuses ('Stages') run from Washington Sq. through Fifth Avenue to 89th St. (fare 10 c.). Others run to Riverside Drive, viâ Fifth Avenue, 57th St., Broadway, and 72nd St. There is also a more or less regular service on some other routes.

Carriages. *Hackney Carriages* are in waiting at the railway-stations, ferries, and principal steamboat-docks, and are also found on stands at Madison Sq., Union Sq., City Hall Park, and many other points. The fares are as follows: *Hackney Carriages* or *Coaches*, to carry 1-4 pers., generally with two horses, $1 for the first mile, and 50 c. for each 1/2 M. addit.; per hr. $1 1/2, each addit. 1/2 hr. 75 c., waiting 40 c. per 1/4 hr. (no charge for stop of less than 5 min.). *Cabs* and *Hansoms* for 1-2 pers., 50 c., 25 c., $1, 50 c., 25 c. One trunk, not exceeding 50 lbs. in weight, free; extra luggage 25 c. per piece. Children under eight years of age, free. Carriages hired from hotels or livery-stables are somewhat dearer. The authorized table of fares should be hung in each carriage. A mile is estimated as equal to twenty blocks from N. to S. and as six blocks from E. to W. to the W. of Fifth Ave. and as eight blocks to the E. of it. In case of dispute the driver should be told to drive to the nearest police-office or to the City Hall, where a complaint may be made to the *Mayor's Marshal*, Room No. 1. Or the hirer may pay the fare demanded and make complaint through the Merchants' Association, 346 Broadway. In all cases a distinct bargain should be made beforehand, and it is often possible to make one on more favourable terms than the legal fares. — *Taximeter Electric Cabs* ('*Taxicabs*') for 1-2 pers., 30 c. for the first 1/2 M., 10 c. for each extra 1/4 M., waiting 10 c. for each 6 min.; for 3-5 pers. 30 c. per 1/3 M., 10 c. for each 1/6 M. extra, waiting 10 c. for each 4 min.; trunk 20 c.

Several of the railway companies have organized excellent cab services for passengers arriving at their New York stations. Thus the fares of the Pennsylvania Co.'s cabs from 23rd St., which are prominently displayed in each vehicle, are as follows: hansom or victoria, for 1-2 pers., 1 1/2 M. 25 c., each addit. mile or fraction 15 c.; four-wheeler, 1 1/2 M., 1-2 pers. 40 c., 3-4 pers. 50 c., each addit. mile or fraction 20 c.; small omnibuses, 1 1/2 M., 1-4 pers. $1, each addit. pers. 10 c., each addit. mile 25 c. Trunk 25 c., valise carried outside 5 c. — Those of the other companies are similar.

The **Automobiles** and **Steam Yacht** of the so-called 'Seeing New York' company (office, Fifth Ave. side of Flat-iron Building, p. 43) afford an excellent method of making a first general acquaintance with the city. The automobiles start from the Flat-iron Building several times daily (incl. Sun.), making an Up Town trip (Fifth Avenue, Central Park, Grant's Tomb, Riverside Drive, etc.; 2½ hrs.; fare $ 1) and a Down Town trip (places of historic and other interest in the S. or lower part of the city, including a visit to the interior of the Stock Exchange; 1¾ hr.; fare $ 1). A car starting at 8.30 p.m. goes to Chinatown (p. 39), including visits to a Joss House, theatre, and restaurant (fare $ 2, including all expenses). The steam-yacht starts twice daily from the Hudson River Day Line Pier at the foot of W. 22nd St. and circumnavigates the island of Manhattan (3 hrs.; fare $ 1). Each party is accompanied by a guide who points out the chief objects of interest with the aid of a megaphone. — More serious students of history are advised to take part in the Saturday Afternoon Excursions of the *City History Club* (see p. 28; fee 50 c.), which also furnishes Historical Guides (fee from $ 3).

Ferries (see Plan). To *Brooklyn*, from Catherine St., Fulton St., Wall St., Whitehall St. (South Ferry), and E. 42nd St. To *Williamsburg* or *East Brooklyn*, from Grand St., Roosevelt St., E. Houston St., E. 23rd St., and E. 42nd St. To *Greenpoint*, from E. 10th St. and E. 23rd St. To *Hunter's Point*, *Long Island City*, from E. 34th St. To *Astoria*, *Long Island City*, from E. 92nd St. (10 c.). To *Jersey City:* from Desbrosses St., from W. 23rd St., and from Cortlandt St. to Pennsylvania Railway Station; from W. 23rd St. and Liberty St. to Central of New Jersey Railway Station (Communipaw; fare 8 c.); from Chambers St. and from W. 23rd St. to Pavonia Avenue and Erie Railroad (comp. also p. 10). To *Hoboken*, from Barclay, Christopher, and W. 23rd Sts. To *Weehawken* (West Shore R.R.), from W. 42nd St. and Desbrosses St. To *Edgewater*, for *Fort Lee* and *Palisade Park*, from W. 130th St. (5 c.). To *Staten Island*, from Whitehall St. (South Ferry; 5 c.). To *College Point* (Queen's Borough), from E. 99th St. To *Blackwell's Island* from E. 26th, E. 52nd, and E. 70th Sts. (pass required; no charge). To *Ward's Island* from E. 116th St. (pass; no charge). To *Randall's Island* from E. 26th. E. 120th, and E. 125th Sts. (pass; no charge). To *Hart's Island* from E. 26th St. (40 c. and pass). To *Liberty Island* (see p. 71), to *Governor's Island* (hourly; pass), and to *Ellis Island* (free; p. 71) from the Battery. The 'Brooklyn' or 'Pennsylvania Annex' is an important ferry connecting Brooklyn (Fulton St., near the Suspension Bridge) with the Penna. R. R. terminus in New Jersey (fare 10 c.). The ferries ply at frequent intervals, the more important running every few minutes in the business-hours. Fares generally 1-3 c. The ferry-boats are comfortable and very unlike European steamers. One side is devoted to a ladies' cabin, but men may also use this when not smoking. These ferries carry about 200 million passengers yearly; but the various new bridges and tunnels (comp. pp. 17, 37, 40, 54, 78) will probably diminish this figure.

Post Office (comp. p. xxv). The *General Post Office* (see p. 37), City Hall Park, is open day and night. The *Money Order Office*, on the second floor, Rooms 40-42, is open daily, except Sun. and holidays, 9-5. The General Delivery windows (for 'Poste Restante' letters) are on the ground-floor, Park Row side. The Registered Letter Office is on the mezzanine floor. Besides the G.P.O. district, the city is divided into about forty postal districts, each served by a branch post-office or *Station*, generally designated by letters of the alphabet (Station A, etc.; open 7-8, Sun. 9-11 a.m.), and there are also about 235 *Sub-Stations*, in druggists' shops, where all the ordinary postal services are rendered, including the issue of domestic or inland money orders. Letters within New York are delivered more expeditiously if the 'station letter' is affixed to the address. Letters are also expedited in delivery if posted on the same side of Fifth Ave. (E. or W.) as their destination. Stamps are also sold in many other shops (chiefly druggists') throughout the city; and letters may be posted in about 3260 *Letter Boxes*, affixed to lamp-posts, or in any hotel.

From 12 to 32 collections, and from 3 to 9 deliveries are made daily according to the district. Letters are collected on Sun. (at less frequent intervals), but, unless they are 'Special Delivery' letters, are not delivered; mail matter may, however, be obtained on Sun., 9-11 a.m., on the Mezzanine Floor, G.P.O., and at the district-offices. The time of closing of foreign mails is advertised in the daily papers; the chief European mails are despatched on Tues., Wed., Thurs., and Saturday.

Telegraph Offices (comp. p. xxv). *Western Union Telegraph Co.*, 195 Broadway; chief branch-offices, 599, 854, and 1227 Broadway, 16 Broad St., 813 Sixth Avenue, Fifth Ave. (cor. 22nd St.), and 249 W. 125th St. All these are open day and night. There are also about 250 other branch-offices throughout the city, including all the principal hotels and the Grand Central Depot, and Atlantic Cable messages are received at all of them. The rate for local messages in New York and Brooklyn is 20 c. per 10 words, and 1 c. for each additional word; for other parts of the United States it varies from 25 c. to $1 per 10 words. No charge is made for address or signature. — *Postal Telegraph-Cable Co.*, 253 Broadway and many branch-offices; similar charges. — The rate per word for cable messages to Great Britain, Ireland, France, Germany, Belgium, and Holland is 25 c.; Switzerland 30 c.; Italy 31 c.; Austria-Hungary 32 c.; Denmark and Norway 35 c.; Sweden 38 c.; Russia 43 c.; Spain 38-40 c.; Portugal 39 c.

Telephone Offices. The telephone service of New York is supplied by the *New York Telephone Co.*, 15 Dey St. and 18 Cortlandt St., which has branch-offices at 115 W. 38th, 127 W. 125th, and 366 W. 150th Sts. Public Pay Stations (indicated by a sign with a blue bell) are found in every part of the city, generally in hotels, drug-stores, telegraph-stations, ferry-houses, and so on. The charge for a local call at these stations is 5 c. (10 c. in most hotels). 'Long Distance' calls may be made to practically every town within 1000 M. of New York (charges high).

Messenger Service. This is carried on by the *American District Telegraph Co.* (4 Dey St.) and the *Postal Telegraph Co.* (253 Broadway), which have numerous offices throughout New York, generally in the stations of the telegraph companies. Message boys can be summoned by the 'automatic calls' found in hotels, banks, offices, and many private houses. Fees by tariff (about 30-40 c. per hour).

Express Service. Broadway below Trinity Church is the headquarters of the numerous express companies of New York, by which baggage may be expressed to all parts of the world. Among the chief are: *Adams Express Co.* (comp. p. 85), *American Express Co.*, *Wells, Fargo, & Co.*, Broadway Nos. 61, 65, & 51; *United States Express Co.*, 2 Rector St. For expressing baggage within the United States, the traveller will, however, seldom need to leave his hotel. Among the chief 'Transfer Companies' for transferring luggage within New York and Brooklyn are *Westcott* (cor. of Madison Ave. and 147th St.) and the *New York Transfer Co.* (1 Astor House and 1354 Broadway); 30-50 c. per trunk, according to distance.

Tourist Agents. *Raymond & Whitcomb Co.*, 225 Fifth Ave.; *Thos. Cook & Son*, 245 and 1200 Broadway.

d. Theatres. Concerts. Sport. Clubs, etc.

Theatres (usual prices from 50 c. to $2). *Metropolitan Opera House* (Pl. G, 2; *II*), 1419 Broadway; prices $1-5. — *Manhattan Opera House* (Pl. G, 2; *II*), 34th St., near Eighth Ave.; prices $ 3/4-5 (Sun. concerts $ 1/2-1 1/2). — *Academy of Music* (Pl. E, 3; *II*), cor. of Irving Pl. and E. 14th St., now used for spectacular dramas, etc. — *Daly's Theatre* (Pl. F, 3; *II*), corner of Broadway and 30th St. — *Wallack's Theatre* (Pl. F, 3; *II*), Broadway, cor. 30th St., high-class comedy. — *Broadway Theatre* (Pl. G, 2; *II*), Broadway, cor. 41st St., comedies, light operas, etc. — *Lyceum* (Pl. H, 2; *II*), W. 45th St., comedy. — *Lyric Theatre* (Pl. G, 2; *II*), W. 42nd St. — *New Amsterdam Theatre* (Pl. G, 2; *II*), W. 42nd St., with elaborate plastic and painted decorations. — *Stuyvesant*, 115 W. 44th St., near Broadway (Pl. G, 2; *II*). — *Astor* (Pl. H, 2; *II*), W. 45th St., cor. Broadway. — *Berkeley*, Fifth Ave., cor. 44th St. (Pl. G, 3; *II*). — *Hackett*

(Pl. G, 2; *II*), W. 42nd St., near Eighth Ave. — *Madison Square Theatre* (comp. p. 53). — *Empire Theatre* (Pl. G, 2; *II*), Broadway, cor. 40th St. — *Herald Square Theatre* (Pl. G, 2; *II*), Broadway, cor. 35th St. — *Garden Theatre* (Pl. F, 3; *II*), Madison Ave., cor. of 27th St. (see p. 53), comedy. — *Knickerbocker Theatre* (Pl. G, 2; *II*), cor. of Broadway and 38t St. — *Garrick Theatre* (Pl. G, 3; *II*), W. 35th St., to the E. of Sixth Ave. — *Bijou Theatre* (Pl. F, 3; *II*), Broadway, between 30th and 31st Sts. — *Hudson Theatre* (Pl. G, 2; *II*), W. 44th St.; $ 1/4-2. — *Liberty Theatre* (Pl. G, 2; *II*), 42nd St., to the W. of Seventh Ave. — *Majestic* (Pl. I, 2; *II*), Broadway, cor. of 59th St. — *New German Theatre* (Pl. I, 3; *II*), Madison Ave.; 35 c. to $ 2 (less on Sun.). — *Belasco Theatre* (Pl. G, 2; *II*), W. 42nd St., near Broadway. — *Criterion* (Pl. G, 2; *II*), Broadway, cor. of 44th St. — *Savoy* (Pl. G, 2; *II*), 112 W. 34th St. — *Victoria* (Pl. G, 2; *II*), Seventh Ave., cor. of 42nd St.; $ 1/2-1. — *Murray Hill Theatre* (Pl. G, 3; *II*), Lexington Ave., cor. of 42nd St.; $ 1/4-1 1/2. — *Grand Opera House* (Pl. F, 2; *II*), Eighth Ave., cor. 23rd St., a large house (2200 seats); $ 1/2-1. — *Fourteenth St. Theatre* (Pl. E, 2; *II*), near Sixth Ave.; popular pieces; $ 1/4-1 1/2. — *New York Theatre* (Pl. G, 2; *II*), Broadway, cor. 45th St., with roof-garden; $ 1/4-1. — *Casino* (Pl. G, 2; *II*), Broadway, cor. 39th St., operettas; in summer, concerts on the roof, see below. — *German Theatre* (*Amberg's;* Pl. E 3, *II*), cor. of Irving Place and E. 15th St.; performances in German; 35 c. to $ 2. — *Thalia* (Pl. C, 4; *I*), 48 Bowery; formerly, as the 'Bowery Theatre', the leading theatre of New York, but now relinquished to 'down town' performances in Yiddish; $ 1/4-1. — *Third Avenue Theatre* (Pl. F, 3; *II*), between 30th and 31st Sts.; melodrama and popular pieces; 15-75 c. — *American Theatre* (Pl. G, 2; *II*), Eighth Ave., cor. 42nd St., with roof-garden; cheap but good opera, plays, etc.; $ 1/4-1. — *West End Theatre*, 368 W. 125th St., near Eighth Ave. (Pl. C, 2); $ 1/4-1. — *New Circle Theatre*, Broadway, cor. 60th St. (Pl. I, 2), $ 1/4-1; *Lincoln Square Theatre* (Pl. I, 2), Broadway, cor. 65th St., $ 1/4-1; *Gaiety* (Pl. H, 2; *II*), W. 46th St. The *New Theatre* (Pl. I, 2), Central Park West, cor. W. 62nd St., is an endowed theatre to be 'maintained for the advancement of art, and not for commercial gain'. — VARIETY THEATRES: *Keith & Proctor's Theatres* in 14th St., near Broadway (*Union Square;* Pl. E 3, *II*; 25 c. to $ 1), in Broadway, cor. 28th St. (*Fifth Avenue Theatre;* Pl. F, 3; from 25 c.), in 23rd St.; near Sixth Ave. (Pl. F 2, *II*; from 10 c.), in Seventh Ave., cor. 125th St. (*Harlem Opera House;* from 15 c.), in 58th St., cor. Third Ave. (Pl. H, 3, 4; from 10 c.), and in 125th St., near Lexington Ave. (from 10 c.); *Tony Pastor's*, in Tammany Hall Building (p. 43), from 20 c.; *Colonial Theatre*, Broadway, cor. 62nd St., $ 1/4-1 1/2; *Alhambra*, Seventh Ave., cor. 126th St., $ 1/4-1; *Hammerstein's (Victoria)*, Broadway, Seventh Ave., & 42nd St., $ 1/4-1. — The performances at the New York theatres, unless otherwise stated in the advertisements, begin at 8 or 8.15 p.m.; 'matinee' performances at 2, 2.15, or 2.30 p.m. on Saturday. Tickets may be bought in advance at Rullman's (111 Broadway), at Tyson's (1122 Broadway), and at the chief hotels (small premium charged), but this is not often necessary. Full dress is nowhere compulsory, but is customary at the Opera and the most fashionable theatres. Ladies often wear street-dress, even when accompanied by gentlemen in evening dress, but are generally expected to doff their hats.

Music Halls and other Places of Amusement. *Madison Square Garden* (p. 53), a huge block bounded by Madison and Fourth Avenues and 26th and 27th Sts., containing an amphitheatre, accommodating 15,000 people and used for horse-shows, flower-shows, equestrian performances, and the like; a theatre (see above); a large concert and ball room (1500 people); a restaurant; and an open-air garden on the roof (4000 people). *View of New York, by day or night, from the Tower (300 ft. high; elevator; adm. 25 c.; open 10-6). — *Hippodrome* (Pl. G, 3; *II*), a huge building (5600 seats) in Sixth Ave., between 43rd & 44th Sts., for spectacular and equestrian performances (at 2 & 8 p.m.); prices $ 1/4-2 1/2. — *Eden Musée* (Pl. F, 3; *II*), 23rd St., between Fifth and Sixth Avenues; a wax-work show, with good musical performances, cinematograph, winter-garden, smoking-room, etc., open 11-11, Sun. 1-11; adm. 50 c., on Sun. 25 c. — *Weber Music Hall* (Pl. F, 3; *II*), Broadway, cor. 29th St.; from 50 c. up. — *Casino Garden*, on the top of the Casino Theatre (see above), a beer-garden, with musical perfor-

mances (in summer); adm. free to visitors of the theatre. — The so-called '*Dime Museums*' can scarcely be recommended, and visitors should also steer clear of most of the '*Concert Saloons*'.

Concerts. New York cultivates high-class music with distinguished success and enjoys a series of concerts ranking with the best in Europe. No fewer than seven series of admirable subscription Symphony Concerts are given in Carnegie Music Hall (p. 54). Those of the *Philharmonic Society* (founded 1842) are given every 2nd or 3rd Saturday during the season (Nov.-April) at 8.15 p.m. (conductor, Wassily Safonoff); public rehearsals on the Fridays before the concert at 2 p.m. The *New York Symphony Concerts* are conducted by W. Damrosch, the *Russian Symphony Concerts* by Altschuler, the *People's Symphony Concerts* by Arens, the *Young People's Symphony Concerts* by F. Damrosch, the *Volpe Symphony Concerts* by Volpe, and the *Boston Symphony Concerts* by Max Fiedler. Other fashionable subscription concerts are given in the rooms of the *Waldorf-Astoria Hotel* (p. 12). Excellent concerts are also given by the *Oratorio Society* (the largest choral society in the city), the *People's Choral Union*, the *Arion Society* (in the club-house in Park Avenue, p. 52), the *Liederkranz* (113 E. 58th St., between Park and Lexington Avenues), the *Beethoven Männerchor*, the *Sängerbund*, the *Mendelssohn Glee Club* (119 W. 40th St.), the *Musical Art Society* (about twice yearly), etc. The above concerts are mainly attended by members and subscribers, but a limited number of single tickets is obtainable in some cases. The *Mendelssohn Hall*, 119 W. 40th St., is used mainly for recitals. Good Sun. evening or afternoon concerts are given at the *Manhattan* and *Metropolitan Opera Houses* (p. 20), at the *Hippodrome* (p. 21), and at the *German Theatres* (p. 21). In summer bands play at frequent intervals in *Central Park* (Sat. & Sun. afternoons), the *Battery*, *Tompkins Square*, etc. — For details, see the daily newspapers.

Exhibitions of Paintings. *Metropolitan Museum*, see p. 58; *Lenox Library*, see p. 50; *New York Historical Society*, see p. 54; *Annual Exhibitions of the National Academy of Design* (p. 55) in spring and winter at the Galleries of the American Fine Arts Society, 215 W. 57th St., between Seventh Ave. and Broadway; *American Water Colour Society*, usually at the same galleries in May; *New York Water Colour Club*, a the Fine Arts Society Galleries (Dec.); *Architectural League*, in the same galleries (Feb.); *National Society of Craftsmen*, 119 E. 19th St. (permanent exhibition of products of the Arts and Crafts); *Ten American Painters*, at the Montross Gallery, N.W. cor. of Fifth Ave. & 35th St. (April). Loan exhibitions are given in the season by the *Lotos*, *Union League*, *Century*, and *Salmagundi Clubs* (the last club largely composed of professional artists). During the season (Nov.-May) so-called 'One Man Shows' (exhibitions of individual artists) are held at Knoedler's (7 E. 35th St.), Durand-Ruel's (5 W. 36th St.), Tooth's, Montross's, Macbeth's (these three in Fifth Ave.), and other prominent art dealers'. Other exhibitions at irregular intervals are given by the *National Sculpture Society*, the *National Arts Club* (p. 24), etc. Adm. to the annual exhibitions 25-50 c., to the clubs by card, to the dealers' galleries free. — Among the finest private collections are those of *Mrs. Wm. Astor* (modern French, American, and German pictures), *Mr. Wm. Rockefeller* (old Dutch and English and modern French pictures), *Mr. J. P. Morgan* (examples of Roger van der Weyden, Ghirlandajo, etc.), the late *Mr. H. O. Havemeyer* (nine important portraits by Rembrandt, fine examples of F. Hals, P. de Hooch, etc.), the late *Mr. C. T. Yerkes* (p. 50; three historical pieces by Rembrandt; good examples of Hobbema, Jan Steen, A. van Ostade, G. Dou, Terburg, Metsu, F. Hals; fine oriental rugs), *Mr. Emerson McMillin*, *Mr. George A. Hearn*, *Mr. B. Altman* (examples of Rembrandt), *Ex-Senator W. A. Clark*, *Mr. H. C. Frick*, *Mr. H. C. Terrel*, and *Mr. C. M. Schwab*. Visitors specially interested will sometimes be admitted to these on previous application by letter, enclosing card. Visitors are also received at the *Studios* of the leading artists, many of whom have their regular reception days.

Sport. The chief Horse Races near New York are those of the *Westchester Racing Association* at Belmont Park; the *Brooklyn Jockey Club*

at Gravesend, between Brooklyn and Coney Island; the *Brighton Beach Racing Association* at Brighton Beach; the *Empire City Racing Association* at Yonkers; the *Coney Island Jockey Club* at Sheepshead Bay; the *Queens County Jockey Club* at Aqueduct (L. I.); and the *Metropolitan Jockey Club* at Jamaica. The schedule is so arranged that there is racing at one or other of these tracks every week-day from April 15th to Nov. 15th (see daily papers). Adm. to grand-stand $ 2; to field 50-75 c. — STEEPLECHASING is carried on under the auspices of the *National Steeplechase & Hunt Association* and the *United Hunts Association*. — FOX HUNTING (with a 'drag' or carted fox) is carried on in Long Island and New Jersey. — The chief YACHT CLUBS are the *New York* (Pl. G 3, *II*; 2300 members), *Seawanhaka* (1000 members), *Atlantic*, *Larchmont*, etc.; numerous regattas are held in the harbour and Long Island Sound, and an annual cruise, with racing, is made to Newport. — ROWING is best on the Harlem River, where boats may be hired for about 50 c. an hour. There are many clubs here (regatta in summer), and a few on the Hudson and on the Brooklyn and Staten Island shores of the harbour. — CANOEING is practised all round Manhattan Island. The *New York* and the *Brooklyn Canoe Clubs* have their headquarters at Gravesend. — DRIVING. The fashionable drives are through Central Park and along Riverside Drive, where many handsome equipages may be seen on fine afternoons. The chief resorts of the owners of 'fast trotters' are Seventh and St. Nicholas Avenues, to the N. of Central Park, and the 'Speedway' (p. 69), skirting the Harlem River to the N. of 155th St., which is reserved exclusively for fast driving. All who are interested in horses should try to see the scene here. Coaching parties and public coaches (seats usually $ 5) leave the Waldorf-Astoria and the Holland House daily in April, May, and June for points reached viâ N. New York and Westchester County (comp. p. 73). — RIDING is best seen and enjoyed in Central and Riverside Parks. The *Riding Club* has a club-house and ring in 58th St., between Fifth and Madison Aves. — MOTORING is very popular in New York. the chief organizations in connection with it being the *Automobile Club of America* (54th St., W. of Broadway) and the *American Automobile Association* (437 Fifth Ave.). — CYCLING as a sport has practically died out in New York, and no races are now held here. — FISHING, for striped bass, blue fish, weak fish, etc., is practised at various points near New York on the coasts of Long Island and New Jersey. Steamers specially built for deep-sea fishing leave New York every morning in the season and lie out at sea all day (see daily papers). — BASEBALL is played from April to October. The chief professional contests take place in the grounds of the *National League* at Eighth Ave. and 157th St., at the end of the Ninth Ave. El. R. R.. and those of the *American League* in Broadway, between 165th and 168th Sts. The Brooklyn National League Nine plays at grounds between 1st and 3rd Sts. See daily papers. — CRICKET. The chief clubs are the *Livingston Field*, at Livingston (p. 72); the *Manhattan*, at Prospect Park; the *Paterson*, at Paterson (p. 140); and the *Brooklyn*, at Prospect Park. — LAWN TENNIS. Among the chief clubs are the *New York*, at Washington Heights, the *West Side*, at Morningside Heights, and the *King's County*, at Kingston and St. Mark's Avenues, Brooklyn. Tennis courts are attached to the various athletic clubs, and there are hundreds of courts in Central Park. From May to Oct. strangers may play in the *Tennis Building*, W. 41st St., near Seventh Ave. Indoor tennis is also played in the *Seventh Regiment Armoury* (p. 52). — RACQUET & TENNIS CLUB (Pl. G, 3; *II*), 27 W. 43rd St., between Fifth and Sixth Aves. — SKATING is practised on the lakes in Central Park, Van Cortlandt Park (p. 70), and Prospect Park, at the St. Nicholas Skating Rink, 69 W. 66th St., near Columbus Ave. (best), and at the Ice Skating Palace (public). cor. of Lexington Ave. and E. 107th St. — ATHLETICS. *New York Athletic Club* (Pl. I, 3; *II*), at the corner of Sixth Ave. and 59th St., with grounds and country clubhouse on Travers Island, Long Island Sound; *New York Turn-Verein* (German gymnastic society), Lexington Ave., cor. of 85th St.; *Columbia University*, see p. 66; *St. George*, 207 E. 16th St.; *St. Bartholomew*, 209 E. 42nd St.; *Young Men's Christian Association*, with grounds at Mott Haven and several gymnasia (chief club-house at 215 W. 23rd St., p. 44). The

Amateur Athletic Union has its office at 21 Warren St. — FOOTBALL. There are now practically no football games in New York which attract those not immediately interested. Columbia University has for the present ceased to play intercollegiate matches, and the game has been given up by the athletic clubs. — GOLF. Among the chief golf-clubs within easy reach of New York are the *St. Andrew's*, at Chauncey, near Yonkers (p. 86); the *Ardsley*, at Ardsley (see p. 86); the *Morris County*, at Morristown, N. J.; the *Dyker Meadow*, near Fort Hamilton; the *Knollwood*, near Elmsford; the *Englewood*, Englewood, N. J. (p. 73); the *Baltusrol*, near Short Hills, N. J.; the *Shinnecock Hills* (p. 81); the *Tuxedo* (p. 142); the *Oakland*, Bayside, L. I.; the *Crescent Athletic Club*, Brooklyn (p. 75); and the *Marine & Field*, Bath Beach. There are public links in Pelham Bay, Van Cortlandt, Sunset, and Forest Parks. The secretary of the U. S. Golf Association is *Wm. Fellowes Morgan*, Arch 5, Brooklyn Bridge. — SHOOTING. The famous rifle-ranges at Creedmoor, Long Island, 13½ M. from the City Hall, now belong to the New York State militia. There are several gun clubs for 'trap' and pigeon shooting in New Jersey. — POLO is played mainly at the country clubs (see below).

Clubs. The chief clubs, to which strangers can obtain access only when introduced by a member, are the following: *Manhattan Club* (Pl. F, 3; *II*), at the corner of E. 26th St. and Madison Square, see p. 44; *Union League* (Pl. G, 3; *II*), Fifth Ave., cor. 39th St., see p. 47 (1880 members); *Union* (Pl. H, 3; *II*), 1 E. 51st St., cor. Fifth Ave. (1500 members; social); *University* (Pl. H, 3; *II*), Fifth Ave., cor. 54th St., for college graduates (3000 members); *Century* (p. 48), 7 W. 43rd St. (literary and artistic; celebrated meetings on the first Sat. of each month); *Metropolitan* (Pl. I, 3), Fifth Ave., cor. 60th St. (the 'Millionnaires' Club'); *Lotos* (Pl. H, 2; *II*), W. 57th St.; *Knickerbocker*, Fifth Ave., cor. 32nd St. (450 members; sporting and fashionable); *Reform*, 233 Fifth Ave. (for those interested in political reforms; 1000 members); *City Club* (Pl. G, 3; *II*), 55 W. 44th St. (for those interested in municipal reform); *Merchants' Club*, 108 Leonard St.; *New York* (p. 47), 20 W. 40th St.; *St. Nicholas Club* (Pl. G, 3; *II*), 7 W. 44th St. (650 members; confined to descendants of old New York families); *Republican* (Pl. G, 3; *II*), 54 W. 40th St. (political); *Democratic* (Pl. H, 3; *II*), 617 Fifth Ave. (political); *Authors' Club*, 883 Seventh Ave. (Carnegie Hall No. 809); *Press Club*, 120 Nassau St.; *The Players* (Pl. E, 3; *II*), 16 Gramercy Park, with interesting pictures and relics and the rooms once occupied by Edwin Booth (1833-93), maintained as they were left at his death; *Bar Association* (Pl. G, 3; *II*), 42 W. 44th St.; *Lawyers' Club*, 120 Broadway; *Engineers' Club*, 32 W. 40th St., opposite the Public Library; *Transportation Club*, in the Manhattan Hotel (p. 13); *Machinery Club*, Fulton Building (p. 37); *Railroad Club*, Cortlandt Building (p. 37); *Grolier Club*, 29 E. 32nd St.; *Calumet Club*, 267 Fifth Ave.; *German Club* (*Deutscher Verein*; p. 50), 112 Central Park South; *Progress Club*, Central Park West, cor. 88th St. (Hebrew); *Harmonie*, 10 E. 60th St. (Hebrew); *Arion* (p. 52), Park Ave., cor. 59th St. (German and musical); *Freundschaft* (p. 52), Park Ave., cor. 72nd St. (German); *Alliance Française*, 402 Broadway; *Aldine Association*, Fifth Ave., cor. 18th St. (Constable Building); *Downtown Association*, 60 Pine St. (these two lunching clubs); *Harvard* (Pl. G, 3; *II*), 27 W. 44th St.; *Yale* (Pl. G, 3; *II*), 30 W. 44th St.; *Columbia University Club*, 18 Gramercy Park; *Princeton Club* (Pl. F, 3; *II*), Lexington Ave., cor. 21st St.; *University of Pennsylvania Club*, 44 W. 44th St.; *National Arts Club* (Pl. E, 3; *II*), 14 Gramercy Park; *Lambs Club* (Pl. G, 2; *II*), 128 W. 44th St.; *Catholic*, 120 Central Park South; *Army & Navy* (Pl. G, 2; *II*), 107 W. 43rd St.; *The Friars*, a club of press agents, 102 W. 44th St. (S.W. cor. of Sixth Ave.); *Barnard Club*, 883 Seventh Ave. (for men and women); *Sorosis*, a women's club, meeting monthly at the Waldorf-Astoria; *Colony Club*, for women, 122 Madison Ave., cor. 30th St.; *Women's Pen & Brush Club*, 22 W. 24th St.; *Women's University Club*, 17 E. 26th St. (receptions on Sat.); *Women's Municipal League*, 19 E. 26th St., notable for its share in recent municipal reform. — Among the chief Country Clubs near New York are the *Meadowbrook*, Hempstead, L. I. (p. 80); *Rockaway*, Rockaway, L. I. (p. 80); *Westchester*, at Westchester; and *Richmond*, Staten Island (p. 72).

e. Shops. Baths. Libraries. Churches. Streets. Collections, etc.

Shops (*'Stores'*). Many of the New York shops are very large and handsome, but their prices are, as a rule, considerably higher than those of Europe. The chief shopping resorts are Broadway, from 8th to 34th St.; Fifth Ave., from 14th to 42nd St.; Twenty-Third St., between Fifth and Sixth Aves.; Fourteenth St., between Broadway and Sixth Ave.; and Sixth Avenue, from 12th to 23rd St. (the last two localities somewhat cheaper than the others). An evening visit to Grand St., E. of the Bowery (p. 39), will show the shopping of the tenement-districts in full swing. A characteristic feature is formed by the large 'Dry Goods' stores, huge establishments in the style of the Bon Marché in Paris, containing almost everything necessary for a complete outfit. Among these may be mentioned *Arnold, Constable, & Co.*, 881 Broadway, cor. 19th St.; *Lord & Taylor*, 901 Broadway; *Altman* (Pl. G, 3; *II*), Fifth Ave., cor. 34th St.; *John Wanamaker*, Broadway, Fourth Ave., 8th St., and 10th St.; *Macy*, cor. of 34th St. and Broadway (p. 44); *Stern Brothers*, 32 W. 23rd St.; *McCreery*, 23rd St., cor. 6th Ave., and in 34th St.; *Daniell*, 61 Broadway; *Adams & O'Neill*, cor. of Sixth Ave. and 21st St.; *Siegel-Cooper Co.*, 296 Sixth Ave.; *Le Boutillier Brothers*, W. 23rd St.; *Simpson-Crawford Co.*, Sixth Ave., from 19th to 20th St.

Booksellers. *Charles Scribner's Sons*, 155 Fifth Ave., with an extensive collection of all kinds of books, fine bindings, rarities, etc.; *G. P. Putnam's Sons*, 27 W. 23rd St.; *Dodd, Mead, & Co.*, 372 Fifth Ave.; *E. P. Dutton & Co.*, 31 W. 23rd St.; *Brentano*, Fifth Ave., cor. 27th St., the largest book-shop in the world; *Fleming H. Revell Co.*, 156 Fifth Ave.; *E. S. Gorham*, 285 Fourth Ave.; *Wm. R. Jenkin Co.*, 851 Sixth Ave. (esp. for foreign books); *Lemcke & Buechner*, 812 Broadway (German books); *Dyrsen & Pfeiffer* (late *Christern*), 16 W. 33rd St. (French and other foreign books); *Stechert*, 9 E. 16th St. (German); *Steiger*, 25 Park Place (German); *Spanish-American Book Co.*, 22 E. 22nd St. — SECOND-HAND BOOKSELLERS: *Ammon & Mackel* (late *Leggatt*), 81 Chambers St.; *Harper*, 14 W. 22nd St.; *Smith*, 29 Wall St.; *Clark*, 174 Fulton St.; *Mendoza*, 17 Ann St.; *Richmond*, 326 Fifth Ave.; *Wright*, 6 E. 42nd St.; *Bonaventure*, 6 W. 33rd St.

Bankers. *Brown Brothers & Co.*, 59 Wall St.; *J. P. Morgan & Co.*, 23 Wall St.; *J. Kennedy Tod & Co.*, 45 Wall St.; *Knauth, Nachod, & Kühne*, 52 William St.; *Lazard Frères*, 10 Wall St.; *J. & W. Seligman & Co.*, 1 S. William St.; *A. Belmont & Co.*, 23 Nassau St.; *Bank of Montreal*, 31 Pine St.; *Bank of British North America*, 52 Wall St.; *Ladenburg, Thalmann, & Co.*, 25 Broad St.; *Heidelbach, Ickelheimer, & Co.*, 49 Wall St.; *John Munro & Co.*, 30 Pine St.

Baths. Hot and cold baths may be obtained at all the hotels (25-75 c.) and large barbers' shops (25 c.). Turkish and Russian baths ($ 1½-1½) may be obtained at the following: *Hoffman House* (p. 43); *Lafayette Baths*, 403 Lafayette St.; *Everard*, 26 W. 28th St.; *Produce Exchange*, 8 Broadway; *Woman's Club*, 9 E. 46th St.; *Easton*, 99 Nassau St.; *Mayer*, 1944 Madison Ave.; *Riverside Baths*, 259 W. 69th St. — *Salt Water Swimming Baths*, at the Battery (25 c., warm 30 c.). There are also several *Free Public Baths*, both on the Hudson and the East River, visited annually by 5-6 million bathers (June-Sept.). The *People's Baths*, 9 Centre Market Place, are also free (separate rooms 5 c.).

Libraries and Reading Rooms. Greater New York contains about 350 more or less public libraries. *New York Public Library* (Astor, Lenox, & Tilden Foundations), see p. 47; *Astor Library*, see p. 42 (9 to 6); *Lenox Library*, see p. 50 (9-6); *Mercantile Library* (p. 42), open to subscribers only (6 months $ 3); *Cooper Institute Reading Room* (see p. 42), open free, 8 a.m. to 10 p.m.; *Mechanics' Institute Library*, 16-24 W. 44th St. (100,000 vols.; open 8-8); *Y. M. C. A. Reading Rooms*, free, at 317 W. 57th St., 361 Madison Ave., 5 W. 125th St., etc. (8-10); *Young Women's Christian Association*, 7 E. 15th St. (9-9); *New York Society Library*, 109 University Place, founded in 1754 (100,000 vols.; 9-6, reading-room 9-9; for members only); *Historical Society* (p. 54), for strangers on the introduction of a member (9-6); *City Library* (interesting historical works), in the City Hall (p. 38); *Mott Memorial Library* (medical), 64 Madison Ave. (10-5); *New York Hospital Library*, 6 W.

16th St. (medical; 10-5); *Law Institute Library*, Post Office, Rooms 116-122, 4th floor (legal; 60,000 vols.; 9-10); *American Institute Library*, 19 W. 44th St. (agricultural and industrial; 9-6); *Geographical Society*, 15 W. 81st St.; *Hispanic Society of America* (p. 69), 156th St., near Broadway; *Booklovers Library*, 5 E. 23rd St. — There are also good libraries at *Columbia University* (p. 66), the *University of New York* (p. 73), and some of the clubs.

Newspapers. The periodical publications of New York embrace about 50 daily papers, 220 weekly papers and periodicals, and 390 monthly journals and magazines. Among the chief morning papers are the *Herald* (3 c.; Independent), the *Times* (1 c.; Independent), the *Tribune* (3 c.; Republican), the *World* (1 c.; Independent Democratic), the *Sun* (2 c.; Independent), the *American* (1 c.; Independent), the *Press* (1 c.; Repub. and Protectionist), and the German *Staatszeitung* (3 c.; Independent). The chief evening papers are the *Evening Post* (3 c.; an excellent Independent and Free Trade organ), the *Mail* (formerly *Mail & Express;* 1 c.; Repub.), the evening editions of the *Sun* and *World* (1 c. each), the *Telegram* (the evening edition of the Herald; 1 c.), the *Journal* (the evening edition of the American; 1 c.). and the *Globe* (formerly *Commercial Advertiser;* 1 c.; Repub.). Most of the daily papers publish Sunday editions; price 5 c. Among the weeklies are the *Nation*, a high-class political and literary journal (10 c.); the *Outlook* (10 c.); the *Independent* (10 c.); *Town & Country* (established by N. P. Willis as *The Home Journal*); *Collier's Weekly*, *Harper's Weekly*, and other illustrated papers; *Life*, *Puck*, *Judge*, and other comic journals; the *Scottish American Journal* (7 c.); and numerous technical and professional journals. The leading monthly magazines include the *Century*, *Scribner's*, *Harper's*. the *North American Review*, the *Popular Science Monthly*. *McClure's*, *Munsey's*, *American*, *Outing*, *Review of Reviews*, *The World's Work*, *Harper's Bazaar* (for ladies), the *Ladies' Home Journal*, *St. Nicholas* (for children), *Putnam's*, and the *Bookman*. The *Forum* is a good quarterly.

Churches. There are in all about 600 churches in New York, of which one-fifth are Roman Catholic. The services in the Protestant churches usually begin at 11 a.m. and 8 p.m. The Sat. papers publish a list of the preachers for Sunday, and information is freely given at the hotels, at the City Mission, Fourth Ave., cor. 22nd St., or at the Y. M. C. A. The following list mentions a few of the chief congregations.

Baptist. *Calvary Church* (Pl. H, 2; *II*), W. 57th St., between Sixth and Seventh Ave. (Rev. Dr. McArthur); *Fifth Avenue* (Pl. H, 3; *II*), W. 46th St., near Fifth Ave. (Rev. Dr. C. F. Aked); *Judson Memorial*, Washington Sq. (see p. 46); *Madison Avenue*, Madison Avenue, cor. of 31st St. (Rev. Dr. Henry M. Sanders).

Christian Science. *First Church of Christ Scientist*, Central Park West, cor. of 96th St.; *Second Church of Christ Scientist*, Central Park West, cor. of 68th St. — Three other churches at 82 W. 126th St., in W. 82nd St., and at 228 W. 45th St.

Congregational. *Broadway Tabernacle* (Pl. H, 2; *II*), Broadway, cor. 56th St. (Rev. Dr. Jefferson); *Pilgrim*, Madison Ave., cor. 121st St. (Rev. Frederick Lynch); *Manhattan*, Broadway, cor. 76th St. (Rev. Dr. Stimson).

Dutch Reformed. *Marble Collegiate* (Pl. F, 3; *II*), Fifth Ave., cor. 29th St. (Rev. D. J. Burrell); *Collegiate Church of St. Nicholas* (p. 48; Pl. H 3, *II*), Fifth Ave., cor. 48th St. (Rev. Dr. D. Sage Mackay; these both with good music and vocal quartettes); *Madison Avenue*, Madison Ave., cor. 57th St. (Rev. Dr. Kittredge).

Friends or Quakers. *Meeting Houses*, E. 15th St., cor. Rutherford Place, and 144 E. 20th St. (Orthodox).

Lutheran. *Gustavus Adolphus Swedish Evangelical*, 150 E. 22nd St. (Rev. Mr. Stolpe); *St. James*, 870 Madison Ave. (Rev. Dr. Remensnyder); *Evangelical Lutheran Church of the Advent*, Broadway, cor. 93rd St. (Rev. Wm. M. Horn); *St. Peter's German Evangelical*, 474 Lexington Ave. (Rev. Dr. Moldehnke).

Methodist Episcopal. *Calvary*, Seventh Ave., cor. 129th St. (Rev. Willis P. Odell); *Cornell Memorial*, E. 76th St. (Rev. Chas. P. Tinker);

Madison Avenue, 659 Madison Ave. (Rev. Dr. Macmullen); *St. Andrew*, W. 76th St. (Rev. J. O. Willson); *St. James*, Madison Ave. (Rev. Allan McRossie).

Presbyterian. *Brick Church* (Pl. G, 3; *II*), 410 Fifth Ave. (Rev. Dr. Richards and Rev. Shepherd Knapp); *Fifth Avenue* (Pl. H, 3; *II*), cor. 55th St. (Rev. Dr. Ross Stevenson); *Old First*, 54 Fifth Ave. (Rev. Dr. Duffield); *Fourth Avenue*, 286 Fourth Ave. (Rev. Dr. Buchanan); *Harlem*, 122nd St., Mt-Morris Park West (Rev. Dr. Caughey); *Madison Square* (Pl. F, 3; *II*). 506 Madison Ave., cor. of Madison Sq. (Rev. Dr. Parkhurst); *University Place*, cor. E. 10th St. (Rev. Dr. Alexander).

Protestant Episcopal. *Cathedral*, see p. 66; *All Souls*, 86 St. Nicholas Ave. (Rev. G. S. Pratt); *Calvary*, 273 Fourth Ave. (Rev. Dr. J. L. Parks); *Grace Church*, 800 Broadway (Rev. Dr. Huntington; see p. 42); *Heavenly Rest*, 551 Fifth Ave. (Rev. Dr. Morgan; see p. 48); *St. Bartholomew*, 348 Madison Ave. (Rev. Dr. Leighton Parks; see p. 53); *St. George*, 7 Rutherford Place (Rev. Hugh Birckhead; see p. 53); *St Michael*, Amsterdam Ave. (Rev. Dr. Peters; see p. 68); *St. Thomas* (Pl. H, 3; *II*), Fifth Ave., cor. W. 53rd St. (Rev. E. M. Stires); *Trinity*, Broadway, at the corner of Rector St. (Rev. Dr. William T. Manning; comp. p. 36); *Ascension*, 36 Fifth Ave. (Rev. Dr. Percy S. Grant; see p. 46); *St. Mary the Virgin* (Pl. H, 2; *II*), 139 W. 46th St. (a high church, with an elaborate musical ritual and orchestra).

Roman Catholic. *St. Patrick's Cathedral*, Fifth Ave. (see p. 48); *All Saints*, Madison Ave., cor. 129th St.; *St. Francis Xavier* (Pl. E, 2, 3; *II*), 36 W. 16th St.; *St. Stephen*, 149 E. 28th St.; *St. Paul the Apostle*, Columbus (Ninth) Ave., cor. 59th St.; *St. Gabriel*, 312 E. 37th St.; *St. Agnes*, 143 E. 43rd St.; *Sacred Heart*, 447 W. 51st St.; *St. Joseph*, 59 Sixth Ave; *Blessed Sacrament* (p. 45). There are several German, French, Italian, and Polish R. C. Churches.

Swedenborgian or New Jerusalem Church at 114 E. 35th St.

Synagogues. *Beth-El*, Fifth Ave., cor. 76th St. (Rev. Dr. F. S. Schulman); *Shaarai Tephila*, W. 82nd St. (Rev. Dr. de Mendes); *Temple Emanu-El*, Fifth Ave., cor. 43rd St. (Rev. J. Silverman and Rev. L. Magnus; see p. 48); *Rodof Sholom*, Lexington Ave., cor. 63rd St. (Rev. R. Grossmann); *Shearith Israel*, Central Park West, cor. 70th St. (Rev. H. P. Mendes).

Unitarian. *All Souls* (Pl. E, 3; *II*), Fourth Avenue, cor. 20th St. (Rev. T. R. Slicer); *Messiah* (Pl. G, 3; *II*), 61 E. 34th St., cor. Park Ave. (Rev. Dr. Robert Collyer and Rev. Dr. J. H. Holmes).

Universalist. *Church of the Divine Paternity*, Central Park West, cor. 76th St. (Rev. Dr. Frank O. Hall).

Among the chief churches for *Coloured Persons* are *St. Benedict the Moor's* (R. C.), Eighth Ave., cor. of W. 53rd St., and the Methodist Episcopal Churches of *Zion* (351 Bleecker St.) and *Bethel* (239 W. 25th St.).

The headquarters of the *Salvation Army* are at 120 W. 14th St.

The *Society for Ethical Culture* (Dr. Felix Adler) meets in Carnegie Hall, Seventh Ave., cor. of 57th St.

The Greater New York Fire Department has its headquarters at 157 E. 67th St. The force, which consists of upwards of 4150 men, with 161 engine companies (including seven fire-boats), 65 hook and ladder companies, and 7 hose companies, is under the supervision of a Fire Commissioner, with a Deputy Commissioner at Brooklyn (365 Jay St.). The uniformed force is under the command of *Chief Edw. F. Croker*. Its annual cost is about $ 7,500,000 (1,500,000*l*.), and it has to deal yearly with 13,000 fires. The service and equipment are excellent, and the engine-houses and fire-boats (headquarters at Battery Park) are interesting. — The *Insurance Patrol*, maintained by the Board of Fire Underwriters, co-operates with the firemen in extinguishing fire, besides devoting itself to the special work of guarding property.

Streets. Above 13th St. the streets of New York are laid out very regularly and cross each other at right angles, the chief exception being the old thoroughfare of Broadway, which crosses the island diagonally from S.S.E. to N.N.W. The streets in the lower part of the island are generally named after colonial worthies. Higher up those running across the island from E. to W. are numbered consecutively from 1 up to 242,

while those running N. and S. are named Avenues and numbered from 1 to 12. In the widest part of the island, to the E. of First Avenue, are the additional short avenues A, B, C, and D, while higher up, between Third and Fourth and between Fourth and Fifth Avenues respectively, are Lexington Avenue and Madison Avenue. To the N. of 59th St. the continuations of 8th, 9th, 10th, and 11th Avenues are known respectively as Central Park West, Columbus Ave., Amsterdam Ave., and West End Ave. The numbers in the avenues begin at the S. and run towards the N. Twenty blocks average 1 M. Above 8th St. the cross-streets are known as E. and W. with reference to their position to Fifth Ave., and their numbers begin at this avenue and run E. and W. A new hundred is begun at each avenue. The avenues are usually 100 ft. wide, and the cross streets 60-100 ft. The names of the streets are generally given on the corner lamp-posts. Those of foreign origin are usually anglicized in pronunciation (*e.g.* Desbrosses St., pron. Dess-bross-es St.). New Yorkers often omit the word 'street' after the name of a street; thus one will give his address as 'corner of 5th Ave. and 57th'; while the conductor of the Elevated Railroad will announce a station as 'Grand' or '23rd.'

Police Stations. The *Central Police Station*, with the *Office of the Commissioners of Police* and the *Headquarters of the Detective Bureau*, is at 300 Mulberry St. (new quarters now being erected in Centre St., between Broome and Grand Sts.), and the city of Greater New York is divided into 85 precincts, and 8 sub-precincts, each with its police station. The police force consists of about 7800 patrolmen, and about 1300 superior officers of all ranks; of these, about 5000 patrolmen and 725 officers are assigned to Manhattan and the Bronx or old New York proper. The 'Broadway Squad' and the mounted men in Fifth Ave. are especially efficient and fine-looking. — The headquarters of the famous *Pinkerton Detective Agency* (800 detectives) are at No. 57 Broadway.

Books of Reference. *Moses King's* 'Views of New York City' illustrates 400 of the chief points of interest (1908; $1½), while *Charles Huard's* 'New York comme je l'ai vu' (1906) contains about 200 clever sketches of New York scenes and types. *Theodore Roosevelt's* 'New York', in the Historic Towns Series ($1.25), is an extremely interesting little volume. See also 'Literary New York', by *Chas. Hemstreet* (1904); 'Tour around New York', by *Felix Oldboy* (*John F. Mines;* 1893); and 'Story of New York', by *Todd.* 'The Better New York', by *Wm. H. Tolman* and *Charles Hemstreet*, describes the philanthropic side of the city's life. The leaflets of the *City History Club* (23 W. 44th St.) are usually excellent (5 c. each). — The *Brooklyn Daily Eagle Almanack* and the *World Almanack* are packed with useful information about Greater New York. Addresses can be found in the lists of the N. Y. Telephone Co. (p. 20), or in *Trow's Directory*, which may be consulted at any drug-store or hotel-office. *Bullinger's Monitor Guide* (kept at many hotels, drug-stores, etc.) contains the latest information as to trains, steamers, intra-mural transportation, ferries, theatres, and other similar topics. — The best plans of New York are published by *August R. Ohman*, 97 Warren St.

British Consulate, 17 State St. (Pl. A, 3; *I*); **Consul-General**, *Courtenay W. Bennett, Esq., C. I. E.;* **Consul**, *Hon. Reginald Walsh* (office-hours, 10-1 & 2-3). — **German Consulate**, 111 Broadway; **Consul-General**, *Mr. R. Franksen.*

Collections. The following is a list of the principal Exhibitions, Collections, etc., with the hours at which they are open.

Aquarium, Castle Garden (p. 33), open free, daily, 9-5, in winter (Oct. 16th to April 14th) 10-4 (on Mon. 1-4 or 5).

Assay Office, United States (p. 35), open daily, 10-2 (Sat. 10-12); free.

Botanical Gardens (p. 71), daily, free.

City Hall (p. 38), daily, 10-4; free.

Custom House, United States (p. 33), daily, 10-2; free.

Decoration, Museum for the Arts of, Cooper Union (p. 42), daily, except Sun. and Mon., 9.30-5; free.

Geological Museum at *Columbia University* (p. 66), daily, 10-4; free.

Grant's Tomb (p. 68), daily, till dusk; free.

Hispanic Society's Museum (p. 69), daily, 9-5; free.
Libraries. Astor (p. 42), daily, free; *Columbia* (p. 67), daily, 8-10, free; **Lenox* (p. 50), daily, free, 9-6, upper floor 9-5 (closed on Sun. & holidays); *Mercantile* (p. 41), daily, free.
Madison Square Garden (pp. 21, 53). Visitors admitted to the tower (*View) daily, 10-6; 25c.
**Metropolitan Museum of Art* (p. 58), daily, 10 to dusk; on Mon. and Frid. 25c., at other times free; also on Mon. and Frid. 8-10 p.m., and on Sun. afternoon.
Mossman Collection of Locks and Keys (p. 48), in the building of the General Society of Mechanics, 16 W. 44th St.; daily, 9-8, free.
**Natural History, Museum of* (p. 56), daily, 9-5 (Mon. & Tues. 25 c., other days free); also on Tues. & Sat. 7-10 p.m. and on Sun. 1-5 p.m. (free).
New York Historical Society (p. 54); daily, on introduction by a member (closed in Aug.).
Picture Galleries. See *Metropolitan Museum*, *Lenox Library*, *Hispanic Museum* and *New York Historical Society*.
Produce Exchange (p. 34); daily; visitors admitted to the balcony; business-hours, 9-4; free.
**St. Patrick's Cathedral* (p. 48); all day; frequent services.
Stock Exchange (p. 35); business-hours, 10-3; visitors admitted to the gallery; free.
Sub-Treasury of the United States (p. 35); daily, 10-3; free (vaults shown to visitors introduced to the Assistant Treasurer).
**Trinity Church* (p. 36); open all day.
World Office (p. 38); visitors admitted to the Dome (*View), 8.30-6; 5 c.
Zoological Garden (p. 71), daily; on Mon. & Thurs. 25 c., on other days free.

Principal Attractions. *Walk or drive in *Broadway* (p. 34) and *Fifth Avenue* (p. 45); **Central Park* (p. 55); **Brooklyn Suspension Bridge* (p. 40); **Metropolitan Art Museum* (p. 58); **Natural History Museum* (p. 56); **St. Patrick's Cathedral* (p. 48); *Public Library* (p. 47); **Lenox Library* (p. 50); *Williamsburg Bridge* (p. 40); **Riverside Drive* (p. 67); *Grant's Tomb* (p. 68); *Soldiers and Sailors Monument* (p. 68); **Columbia University* (p. 66); *High Bridge* (p. 70); *College of the City of New York* (p. 69); *Washington Bridge* (p. 70); *Stock Exchange* (p. 35); **Trinity Church* (p. 36); *Tiffany* and *Vanderbilt Houses* (pp. 53, 49); *Grace Church* (p. 42); *Appellate Court* (p. 43); *Flat-iron Building* (p. 43); *Hispanic Museum* (p. 69); *Zoological Garden* (p. 71); *Speedway* (p. 69); **Harbour* (p. 31); **Ellis Island* (p. 72); *Ninth Avenue Elevated Railroad* at 110th St. (p. 16); *Views from the *Produce Exchange* (p. 34), the *World Office* (p. 38), the *Park Row Building* (p. 39), the *Singer Building* (p. 37), the *Metropolitan Life Insurance Building* (p. 44), the *Tract Society Building* (p. 39), the *Statue of Liberty* (p. 71), or *Madison Square Garden* (p. 53). The electric signs and advertisements of Broadway (23rd-59th Sts.) form a brilliant nightly illumination which the 'country cousin at least will find noticeable.

Greater New York, constituted by charter in 1897, is the largest and wealthiest city of the New World, and inferior in population, as also in commercial and financial importance, to London alone among the cities of the globe. It is situated on New York Bay, in 40° 42′ 43″ N. lat. and 74° 0′3″ W. long. It consists of the boroughs of *Manhattan*, *The Bronx*, *Brooklyn*, *Queens*, and *Richmond*, which have a joint area of 326 sq. M. and an aggregate population (1905) of 4,013,781, of whom about 35 per cent were foreign-born. Its extreme length (N. and S.) is 35 M., its extreme width 19 M. *Manhattan* or *New York* proper, with 2,112,380 inhab., consists mainly of *Manhattan Island*, a long and narrow tongue of land bounded by the *Hudson* or *North River* on the W. and the *East River* (part of *Long Island Sound*) on the E., and separated from

the mainland on the N. and N.E. by the narrow *Harlem River* and *Spuyten Duyvil Creek;* but also includes several small islands in New York Bay and the E. River. Manhattan Island is 13 M. long, and varies in width from about $^1/_4$-$^1/_2$ M. (at its extremities) to $2^1/_2$ M., the general width being about $1^3/_4$-2 M. It is very rocky, the chief formations being gneiss and limestone; and except in the S. portion, which is covered with deep alluvial deposits, a great amount of blasting was necessary to prepare sites for houses and streets. For about half of its length from the S. it slopes on each side from a central ridge, and at the upper end the ground rises precipitously from the Hudson to a height of 240 ft. (Washington Heights), descending rapidly on the E. side to the Harlem Flats. The *Borough of the Bronx* (271,630 inhab.) comprises a portion of the mainland beyond the Harlem River, extending on the N. to a point about 5 M. beyond the limits of the map at p. 72, and also several small islands in the East River and Long Island Sound. Manhattan and The Bronx together form what has hitherto been known, and is still known in ordinary parlance, as the City of New York. This, except when otherwise indicated, will be the meaning of 'New York' in the following pages. The *Borough of Brooklyn* (1,358,686 inhab.), formerly an independent city, is described in R. 3. The *Borough of Queens* (198,240 inhab.) comprises part of Queens County on Long Island, including *Flushing* (p. 81), part of *Hempstead*, *Jamaica*, *Long Island City* (p. 78), and *Newtown*. Its outer boundary is $1^1/_2$-$2^1/_2$ M. to the E. of the map at p. 72. The *Borough of Richmond* (72,845 inhab.) is conterminous with *Staten Island* (p. 72).

The population of New York in 1890, according to the government census, amounted to 1,515,301; that of the various districts now constituting Greater New York was about 2,500,000. In 1699 New York contained only about 6000 inhab. and in 1776 about 22,000 (comp. p. 32); and at the first United States census (1790) it had 33,131. In 1810 the population was 60,515; in 1820, 123,706; in 1840, 312,710; in 1860, 813,669; and in 1880, 1,206,299. Jersey City (p. 73), Hoboken (p. 73), and other New Jersey suburbs, though in a different state, practically form part of the one huge city on New York Bay, and would add upwards of 400,000 to the population given above. The population is composed of very heterogeneous elements, including about 330,000 Irish, 390,000 Germans, 110,000 English and Scottish, 175,000 Italians, 185,000 Russians, 70,000 negroes, and 10,000 Chinese. A large proportion are Roman Catholics. The death-rate is about 18 per 1000.

Greater New York is governed by a Mayor and a Municipal Assembly consisting of two chambers. At the head of each of the separate boroughs is a President. The assessed valuation of taxable property in Greater New York is about $ 4,800,000,000 (one-twentieth of the wealth of the U. S. A.); its annual revenue is about $ 170,000,000. Its debt ($ 593,552,120) is more than twice as large as that of London. The daily water supply amounts to 400,000,000 gallons. Other statistics show that Greater New York contains, 2600 M. of streets (1850 M. paved), 7000 acres of parks and open spaces, 1350 M. of tramways, and 66 M. of elevated railways. A site at the corner of Broadway and Wall St. was sold in 1906 for $ 576 (ca. 120*l.*) per square foot.

The lower and older part of New York is irregularly laid out, and many of the streets are narrow and winding. The old buildings,

however, have been almost entirely replaced by huge new piles of offices, banks, and warehouses. This part of the city is entirely given up to business and is the chief seat of its vast commercial enterprise and wealth. Above 13th St. New York is laid out with great regularity (arrangement of the streets, see p. 27), but the precipitous banks of the Hudson at the N. end of the island (comp. p. 69) have necessitated some deviation from chessboard regularity in that district. Nearly the whole of Manhattan Island, as far as 155th St., is now covered with streets and buildings, but much of the narrow part of the island beyond that point and a still larger proportion of The Bronx (p. 70) have not yet been built over. The names of many of the villages absorbed by the growth of the city s ill cling to the districts here (Manhattanville, Harlem, Washington Heights, Morrisania, etc.). In proportion to its size New York is, perhaps somewhat poorly furnished with open spaces, but Central Park (p. 55) is one of the finest parks in the world, and ample open spaces have been reserved beyond the Harlem River (comp. p. 70). The handsomest streets and residences are generally near the centre of the island, the most fashionable quarters being Fifth Avenue, Madison Avenue, and the portions of the cross-streets contiguous to these thoroughfares. The islands in the harbour belong to the U. S. Government, while those in the E. River are occupied by charitable and correctional institutions belonging to the city. New York is connected with Brooklyn by three fine bridges (pp. 40, 41), and another is building; various schemes for tunnelling the Hudson are now also completed or in progress. Several bridges cross the Harlem River.

***New York Harbour** (comp. p. 2) is one of the finest in the world. The *Upper Bay* or *New York Harbour Proper*, 8 M. long and 4-5 M. wide, is completely landlocked and contains several islands. It communicates through the *Narrows* (p. 2) with *Lower New York Bay*, which is protected from the ocean by a bar running N. from Sandy Hook in New Jersey (18 M. from the Battery) towards Long Island. The bar is crossed by three channels, admitting vessels of 30-40 ft. draught. At the Battery the harbour divides into two branches: the *Hudson* or *North River* to the left and the *East River* to the right. The latter is really a tidal channel connecting New York Bay with Long Island Sound. Manhattan Island, between the two rivers, has a water-front of about 30 M., all of which is available for sea-going vessels except about 5 M. on the Harlem River (comp., however, p. 70; water front of Greater New York about 350 M.). On the other side of the North River, here about 1 M. wide, lies the *State of New Jersey*, with its riverside cities of Jersey City, Hoboken, etc. (comp. p. 73; ferries, see p. 19). To the E. of East River is *Long Island*, with Brooklyn and Long Island City (comp. R. 3). The shipping is mainly confined to the North River below 23rd St., and to the

East River below Grand St. The former contains the docks of the Transatlantic lines, some of which are on the New Jersey side. A walk along South St. shows the shipping in the East River, representing a large proportion both of the foreign and domestic trade of New York. Both rivers are alive with ferry-boats. A pleasant feature of the water-front is formed by the *Pier Gardens* or *Recreation Piers*, intended as winter and summer resorts for the inhabitants of the poorer riverside districts. For the islands, Hell Gate, etc., see pp. 2, 3, 71, 72, 246, 247.

History. Manhattan Island and the mouth of the Hudson are said to have been visited by the Florentine Verrazzani in 1524, but the authentic history of New York begins with the exploration of *Henry Hudson* in 1609 (see p. 82; tercentenary to be celebrated in Sept., 1909). The first permanent settlement on Manhattan Island was made by the Dutch West India Co. in 1624, and the first regular governor was *Peter Minuit*, a Westphalian, who bought the island from the Indians for 60 guilders (about $25 or 5*l.*). The little town he founded was christened *New Amsterdam* and by 1650 had about 1000 inhabitants. The citizens established farms, traded for furs with the Indians, and entrenched themselves in fortifications, the N. limit of which coincided with the present line of Wall St. (p. 35). *Peter Stuyvesant*, the last of the four Dutch governors, arrived in 1647. In 1664 the town was seized, in time of peace, by the English under *Col. Nicholls*, and though retaken by the Dutch in 1673, it passed permanently into English possession by treaty in the following year. The first regular English governor was *Sir Edmund Andros*. The name of the town was changed to *New York* in honour of the Duke of York, to whom his brother, Charles II., had granted the entire province. Among the chief incidents in the Anglo-Colonial period were the usurpation of *Leisler*, leader of the progressive party, in 1689-91, and the *Negro Insurrection* in 1741, the coloured slaves forming at this time not far short of half the population. In 1765 the delegates of nine of the thirteen colonies met in New York to protest against the Stamp Act and to assert the doctrine of no taxation without representation; and the first actual bloodshed of the Revolution took place here in 1770 (six weeks before the Boston Massacre, p. 262), in a scuffle with the soldiers who tried to remove the 'Liberty Pole' of the Sons of Liberty. At this time New York had about 20,000 inhab. (less than either Boston or Philadelphia); and the Ratzer Map of 1767 shows that the town extended to the neighbourhood of the present City Hall Park (p. 37). The town was occupied by Washington in 1776, but after the battles of Long Island and Harlem Heights (see p. 69) the Americans retired, and New York became the British headquarters for seven years. The British troops evacuated the city on Nov. 25th, 1783. From 1785 to 1790 New York was the seat of the Federal Government, and it was the State capital down to 1797. *Hamilton*, *Jay*, and *Burr* were among the prominent men of this period. At the beginning of the 19th century the city had 60,000 inhab., and since then its growth has been very rapid, the tide of immigration setting in powerfully after the war of 1812, in which New York suffered considerably from the blockade. In 1807 the first steamboat was put on the Hudson (see p. 82), and in 1825 a great impulse to the city's commerce was given by the opening of the Erie Canal (p. 92). The Harlem Railway dates from 1831; the Elevated Railroad from 1867; gas-lighting from 1825; the use of electricity for illumination from about 1881. In the Civil War New York sent 116,000 men to the Federal armies, but in 1863 it was the scene of a riot in opposition to the draft, which cost 1000 lives. For several years the city suffered under the machinations of the so-called '*Tweed Ring*', which had gained control of the municipal government; but in 1872 'Boss' Tweed and several of his fellow-conspirators were convicted of embezzlement of public funds and imprisoned. In March, 1888, New

Elevated Railroad
Subway
NEW YORK
I. SOUTHERN PART
1:16.300
Feet
Metres
Freight Depot
Mercantile Exch.
Walker St.
White St.
Franklin Street
Leonard St.
Worth Street
Thomas St.
Duane Street
Reade St.
Chambers St.
Warren St.
Murray St.
Park Place
Barclay St.
Vesey St.
Washington Market
Fulton St.
Dey St.
Cortlandt St.
Liberty St.
Cedar St.
Albany St.
Rector St.
Morris St.
Battery Pl.
Whitehall St.
Broadway
Cortlandt Ave.
Lafayette Street
Baxter Street
Mulberry Bend Park
Mulberry St.
Bayard St.
Canal St.
Thalia Th.
Manhattan Bridge
Pell St.
Chatham Sq.
East Broadway
Henry St.
Catherine St.
Oliver St.
James St.
Monroe St.
Cath. Slip
Roosevelt St.
Oak St.
Cherry St.
Chambers St.
Duane St.
Pearl Street
Lafayette St.
Baxter St.
Mulberry St.
Mott St.
Cortlandt Ave.
Hudson St.
Greenwich St.
Washington St.
Fulton St.
Dey St.
Cedar St.
Rector St.
Morris St.
Battery Pl.
Whitehall St.
Bridge St.
Peal St.
Stone St.
Water St.
South St.
Beekman St.
Ann St.
John St.
Maiden Lane
Cedar St.
Wall St.
Broad St.
Beaver St.
Stone St.
Whitehall St.
Bridge St.
Peal St.
Water St.
Frankfort St.
Ferry St.
Dover St.
Peck Slip
Barling Slip
Fletcher St.
Fulton Ferry
Wall St. Ferry
Long Island City
Brooklyn Bridge
H. Howard Sq.
Crim. Courts
Tombs
New York Life I.
Stewart B.
Hall of Records
Court Ho.
CITY HALL PARK
Home Life
Postal Tel.
City Hall
Staats-Z.
World
Tribune
N.Y. Press
Post Office
Potter
Am. Tract Soc.
Park Row B.
St. Paul's Ch.
St. Paul B.
Nat. Pk. Bank
Hudson Terminal
Mail
W.U. Telegr.
Maiden Lane B.
Singer B.
Cham. of C.
Clear. Ho.
Nat. Bk. of Com.
Mutual L.
Equit. L.
U.S. Realty
Trinity B.
A. Surety
Trinity Ch.
Han. Bk. B.
S. Treasury
U.S. Exp.
Manh. L.I.
St. Ex.
Bk. of Am.
Drexel B.
Old Custom Ho.
Empire B.
C. Cable B.
Atlantic B.
Beaver B.
Cotton Exch.
Hanov. Sq.
Old Slip
42 Broadway B.
Cons. St. Ex.
Standard Oil Co.
Bowl. Green B.
Bowl. Green
Produce Exch.
Washington B.
Whitehall B.
New Custom Ho.
U.S.A. Bldg.
Jeannette Park
BATTERY PARK
Aquarium
U.S. Barge Office
Interborough
39th St. F.
South F.
R.T. Tunnel
Ellis I.
Liberty I.
Communipaw F.
Governor's I.
Staten I.
Hamilton F.
Wagner & Debes' Geog. Estab. Leipzig

York was visited by a terrible 'blizzard', or storm of wind and snow, which cut off all communication with the outside world for several days, causing many deaths and much suffering. In 1890 a Commission was appointed by the State Legislature to inquire into the expediency of the consolidation of New York with Brooklyn and other contiguous towns and cities. In 1896 the act to make this consolidation became law, and in 1897 the charter of Greater New York (p. 29) was finally passed. — *Washington Irving* (1783-1859; comp. pp. 54, 87) and *Henry James* (b. in 1843 at No. 21 Washington Place, Pl. D, 3) were born in New York.

Commerce and Industry. The importance of New York as a commercial centre is shown by the fact that nearly 50 per cent of the entire foreign trade of the United States is carried on through its port. In 1907 the value of foreign imports and exports was $ 1,709,164,423 (341,832,835 *l.*). In the same year the harbour was entered by 4229 vessels, of 11,383,345 tons, and cleared by 3764, of 10,472,601 tons. The duties collected on imports amounted to $ 219,736,773. About four-fifths of the immigrants into the United States land at New York, the number in the year ending June 30th, 1907, being 1,004,756. The manufactures of New York, though relatively less important than its commerce, are very varied and extensive, producing in 1900 goods to the value of $1,371,358,468 (274,271,693*l.*) and employing 462,763 hands.

The S. extremity of the island on which New York stands is occupied by the Battery (Pl. A, 3, *I*), a pleasant little park, 20 acres in extent, commanding a good view of the harbour but now somewhat marred by the intrusion of the elevated railroad. It takes its name from the old *Fort Amsterdam* (see p. 34 and below) erected here by the early Dutch settlers and was long the fashionable quarter for residences. The park contains a statue of *John Ericsson* (1803-89; p. 561), the inventor, by J. Scott Hartley (1893). The large circular erection on the W. side is *Castle Garden*, formerly the landing-place and temporary quarters of immigrants, which have now been transferred to Ellis Island (p. 72). It was at one time a concert-hall, where Jenny Lind made her first appearance in America (1850). It is now fitted up as the **New York Aquarium** (Pl. A 3, *I*; adm., see p. 28; catalogue 10 c.), which contains a very large and fine collection of fish and marine animals. Among the chief objects of interest are the manatee or sea-cow, the seals, the sea-lions, the giant turtles, and the tropical fish. — The *United States Barge Office* (Pl. A, 3; *I*), a tasteful building with a tower 90 ft. high, a little to the E., is an appendage of the custom-house. At the corner of West St. is the *Whitehall Building* (Pl. A 3, *I*; 20 stories high). Many harbour and ferry steamers start from the Battery (comp. pp. 19, 72).

On the N. the Battery is adjoined by the Bowling Green (Pl. A, 3; *I*), the cradle of New York, a small open space, with a statue of *Abraham de Peyster* (1657-1728), by G. E. Bissell, in the middle. It is enclosed by the Washington Building (p. 34; W.), the new Custom House (S.), and the Produce Exchange (p. 34; E.).

The *Custom House (Pl. A, 3; 1), a large quadrangular granite building, in the French Renaissance style, designed by *Cass Gilbert*, was erected in 1902-07 and occupies the site of *Fort Amsterdam* (p. 34; memorial tablet on one of the walls). The façade towards Bowling Green is adorned with colossal groups of Europe, Asia,

Africa, and America, by *Dan. C. French*, and with 12 heroic figures representing the great sea-powers. Adm., see p. 28.

Fort Amsterdam, which included the governor's house and a chapel, was built in 1626 and demolished in 1787. A statue of George III., which formerly stood here, was pulled down on the day of the Declaration of Independence (July 4th, 1776) and melted into bullets. The Washington Building (see below) is on the site of the house erected in 1700 by Archibald Kennedy, Collector of the Port of New York, and afterwards occupied by the British generals Cornwallis, Howe, and Clinton (memorial tablet). Benedict Arnold also occupied a house on the Green, after he fled to British protection; and he was very nearly captured in his garden by a party of Americans rowing over from the New Jersey shore. The railing round the Bowling Green circle dates from before the Revolution.

In Whitehall Street, opposite the Custom House, is the PRODUCE EXCHANGE (Pl. A, 3; *I*), a huge brick and terracotta structure in the Italian Renaissance style, containing numerous offices and a large hall (1st floor), 220 ft. long, 144 ft. wide, and 60 ft. high (adm., see p. 29). The tower, 225 ft. high, commands a fine *View of the city and harbour (elevator).

Whitehall Street, containing the *U. S. Army Building* (Pl. A, 3; *I*), leads hence to the S.E. to the South, Hamilton, and 39th St. ferries to Brooklyn (p. 19). A little to the E., at the S.E. corner of Broad St. and Pearl St., is the old *Fraunces Tavern*, where Washington took farewell of his officers in 1783. It was erected in 1719 and restored by the Sons of the Revolution in 1907. There is a restaurant on the groundfloor, while upstairs is a small collection of relics. No. 73, Pearl St., was the first Dutch tavern, afterwards the Stadhuys or City Hall (tablet).

At the Bowling Green begins ***Broadway** (Pl. A-Q, 3-1), the chief street in New York, extending hence all the way to Yonkers (p. 86), a distance of 19 M. Up to 33rd St., Broadway is the scene of a most busy and varied traffic, which reaches its culminating point in the lower part of the street during business-hours. This part of the street is almost entirely occupied by wholesale houses, insurance offices, banks, and the like; but farther up are numerous fine shops ('stores'; comp. p. 25). Broadway is no longer, as in the Dutch-colonial days of its christening, the broadest street in New York, but it is still the most important. The number of immensely tall office-buildings with which it is now lined give it a curiously canyon-like appearance as we look up it. No. 1 Broadway, to the left, is the *Washington Building* (Pl. A 3, *I*; see p. 33), which is adjoined by the *Bowling Green Building* (16 stories), designed by English architects. Other conspicuous business premises in the lower part of Broadway are the large *Welles* and *Standard Oil Co. Buildings* (to the right, Nos. 18, 26; Pl. A 3, *I*), the *42 Broadway Building* (right; 20 stories; Pl. A 3, *I*), and *Aldrich Court* (Nos. 43-45; left), on the site of the first habitation of white men on Manhattan Island (tablet of the Holland Society). At No. 55 (l.) is a Revolutionary cannon, found in digging the foundations and used as the newel of the outside steps. A little higher up, to the right, at the corner of Exchange Place, is the *Exchange Court Building*, with large and excellent bronze statues of Stuyvesant (p. 32), Clinton, Hudson (p. 32), and Wolfe, by

J. Massey Rhind. At Nos. 64-68 (right) is the *Manhattan Life Insurance Co.* (Pl. A, 3; *I*), the tower of which is 360 ft. high (view). To the left, at the corner of Rector St., is the imposing *Empire Building* (20 stories; Pl. A 3, *I*), the hall of which forms a busy thoroughfare between Broadway and the Rector St. 'El' station. This brings us to *Trinity Church* (p. 36), opposite which is *Wall Street* (see below).

Wall Street (Pl. A, 3; *I*), diverging from Broadway to the right, is the Lombard Street of New York, 'the great nerve centre of all American business', and 'the financial barometer of the country', where 'finance and transportation, the two determining powers in business, have their headquarters'. The street, which follows the line of the walls of the Dutch city, consists mainly of a series of substantial and handsome banks and office buildings. To the left, one block from Broadway, at the corner of Nassau St., is the *Manhattan Trust Building*, 270 ft. high. At the opposite corner of the same street stands the **United States Sub-Treasury** (Pl. A 3, *I*; adm., see p. 29), a marble structure with a Doric portico, approached by a flight of steps bearing a large bronze statue of *George Washington*, by J. Q. A. Ward, erected in 1883. The building occupies the site of the old *Federal Hall*, in which the first U.S. Congress was held and Washington was inaugurated as President. Next to the Sub-Treasury is the *U.S. Assay Office* (adm., p 28), where strangers may see the processes of assaying and refining the crude bullion. Opposite, at the corner of Broad St. (see below), is the *Drexel Building* (Pl. A, 3; *I*), a white marble structure in the Renaissance style (headquarters of J. Pierpont Morgan). At the corner of Exchange Place (see below) is the office of the *Trust Co. of America* (23 stories). Farther along Wall St., at the corner of William St., is the *National City Bank*, occupying the old Custom House (Pl. A, 3; *I*), which has been remodelled and enlarged for its new functions by McKim, Mead, & White. — On the right, between Hanover St. and Pearl St. (with the *Cotton Exchange;* Pl. A 3, *I*), is the *Sampson Building*, and opposite (left) is the *Tontine Building*. At the junction of Wall, Pearl, and Beaver Sts. rises the *Beaver Building* (Pl. A, 3; *I*), a 'flat-iron' (comp. p. 43) office-building (15 stories). Wall St then crosses *Water St.* and *Front St.*, and ends at *South St.* and the ferry to Montague St., Brooklyn.

Broad St., a busy street leaving Wall St. opposite the Sub-Treasury, contains the ***Stock Exchange** (Pl. A, 3; *I*), a white marble building to the right, by George B. Post (1903), with other entrances in Wall St. and New St. Strangers, who are admitted to a gallery overlooking the hall (comp. p. 29), should not omit a visit to this strange scene of business, tumult, and excitement, a wilder scene probably than that presented in any European exchange (business-hours 10-3). The value of railway and other stocks dealt with here daily often amounts to $ 30,000,000 (6,000,000*l.*), besides government bonds. As much as $ 95,000 (19,000*l.*) has been paid for a seat in the New York Stock Exchange. The small stands on the floor represent various stocks (No. 1 Steel Trust, No. 2 Union Pacific, etc.). The numbers appearing on the large black boards on the walls are telephone-calls for members on the floor. There are about 1200 members. — Opposite the Exchange, adjoining the Drexel Building (see above), is the *Mills Building*, one of the first of New York's great office-buildings (1882), now somewhat dwarfed by the modern 'sky-scraper'. At the S.E. corner of Broad St. and Exchange Place is the *Broad-Exchange Building*, a 20-story structure, 276 ft. high. The *Commercial Cable Building* (Pl. A, 3; *I*), with its two domes, is 317 ft. high (view from the roof; pass from the Superintendent). At the S.E. corner of Broad and Beaver Sts. is the *Consolidated Stock and Petroleum Exchange* (Pl. A 3, *I*; visitors admitted to the gallery, see p. 29). Broad St. ends at South St., a little to the N.W. of the Battery (p. 33).

Nassau St., running N. from Wall St., opposite Broad St., contains the *Hanover Bank Building* (Pl. A 3, *I*; 22 stories; 1903), at the corner of Pine Str., and, a little to the N., the office of the **Mutual Life Insurance Co.*

(Pl. B, 3; *I*), one of the handsomest business structures in New York, but not seen to advantage in this narrow street. A tablet commemorates the fact that this was the site of the Middle Dutch Church (1727). At the corner of Cedar St. is the *National Bank of Commerce* (Pl. B, 3; *I*), 270 ft. in height. — In Cedar St., between Nassau St. and Broadway, is the handsome building of the **New York Clearing House Association* (Pl. B, 3; *I*), the business of which averages $ 310,000,000 daily and amounts to $ 95,000,000,000 (19,000,000,000*l.*) per year. The largest daily transaction on record (May 10th, 1901) amounted to $ 622,410,525. — In Liberty St., the next cross-street above Cedar St., is the **New York Chamber of Commerce* (Pl. B, 3; *I*), the oldest commercial corporation in the United States (1770); the present building was designed by J. B. Baker and consists of white marble on a granite base, with Ionic columns and statues of De Witt Clinton, John Jay, and Alex. Hamilton on the façade (1903). — NEW STREET (Pl. A, 3; *I*), running S. from Wall St., is, perhaps, the most canyon-like street in New York.

On the W. side of Broadway, opposite the beginning of Wall St., rises **Trinity Church* (Pl. A 3, *I*; comp. p. lxxxix), a handsome Gothic edifice of brown stone, by *R. M. Upjohn*, 192 ft. long, 80 ft. wide, and 60 ft. high, with a spire 285 ft. high. The present building dates from 1839-46, but occupies the site of a church of 1696. The church owns property to the value of at least $20,000,000 (4,000,000*l.*), used in the support of several subsidiary churches and numerous charities (comp. p. 93).

The INTERIOR (adm., see p. 29), dimly lighted by stained glass, affords a strange contrast to the bustling life of Broadway. The chancel is at the W. end. The altar and reredos, built as a memorial of William B. Astor, are handsomely adorned with marble and mosaics. The bronze doors are a memorial of John Jacob Astor. In the so-called 'Bishops' Room' is the cenotaph of *Bishop Onderdonk*: in the vestry is the white marble monument of *Bishop Hobart* (1775-1830; comp. p. 134). — In the N.E. corner of the CHURCHYARD is a Gothic *Monument* in memory of American patriots who died in British prisons during the Revolution. Adjacent is a bronze statue of *Judge Watts*, Recorder of New York under the British, erected in 1892. By the S. railing of the churchyard is the grave of *Alexander Hamilton* (d. 1804; tomb with pyramidal top). *Robert Fulton* (d. 1815; pp. 82, 85), the father of the steamboat, lies in the vault of the Livingston family, near the S. side of the chancel. Close to the S.E. corner of the church is the monument of *Capt. Lawrence*, slain in 1813 in his gallant defence of the 'Chesapeake' against the British frigate 'Shannon'. Among the other tombs are those of the ill-fated *Charlotte Temple* (?), *Albert Gallatin* (Secretary of the Treasury 1801-13), *Gen. Phil. Kearney* (d. 1862), and *Wm. Bradford* (d. 1752), printer of the first New York newspaper. The oldest stone is dated 1681. See 'History of the Parish' by *Dr. Morgan Dix* (1906).

The lofty building (23 stories) in Rector St., behind Trinity Church, belongs to the *U. S. Express Co.* (Pl. A, 3; *I*).

Just above Trinity Church are the enormous *Trinity* and *U. S. Realty Buildings* (Pl. B 3, *I*; two dignified structures by Francis H. Kimball, the former with an admirable façade in a modified Gothic style), and nearly opposite are the **Union Trust Co.* (No. 80 Broadway) and the 23-story building of the *American Surety Co.* (cor. Pine St., Pl. A 3, *I*; 306 ft. high), the latter containing the *United States Weather Bureau* ('Old Probabilities'). On the same side, between Pine St. and Cedar St., is the office of the *Equitable Life Insurance Co.* (Pl. B, 3; *I*).

The block to the left, between Liberty St. and Cortlandt St. is

occupied by the buildings of the *Singer Manufacturing Co.* (Pl. B 3, *I*; by E. Flagg), the *City Realty Co.*, and the *City Investing Co.* The tower (*View) of the first of these, with its 41 stories, rises to a height of 612 ft. (surpassed only by the Metropolitan Life Co., p. 44).

In Church St., one block to the W. of Broadway, stand the twin **Hudson Terminal Buildings** (Pl. B 3, *I*; *Cortlandt Building*, between Cortlandt and Dey Sts., *Fulton Building*, between Dey and Fulton Sts.), rising to a height of 22 stories and together forming the largest office-building in the world (10,000 tenants; 39 elevators). The architects were Clinton & Russell. The two buildings constitute the New York terminal of the *Hudson and Manhattan Railroad Tunnels*, running under the Hudson River to Montgomery St., Jersey City (see p. 10); and the four stories below ground, forming one continuous structure, contain the ticket-offices, concourse, and platforms for the electric trains running through the tunnels. Two similar tunnels (Pl. C, D, 1, 2) cross the river from 15th St., Jersey City, to Morton St., New York; and all four are popularly known as the *McAdoo Tunnels* from the name of their chief entrepreneur. From Morton St. a subway has been constructed to Sixth Ave. at 9th St. (Pl. D, E, 2, 3), and thence due N. to the corner of Sixth Ave. and 33rd St. (Pl. F, G, 2; *II*), where a large terminal station will be built. A parallel subway on the New Jersey shore will connect with all the large terminal railway-stations there; and in New York there will be connections with the Manhattan Subway and the new Pennsylvania R. R. Station. The tunnels bring New York within a few minutes of Jersey City and Hoboken (comp. p. 19). The whole system is expected to be completed early in 1910.

Several other sky-scrapers are passed on Broadway before we reach Fulton St.

Fulton Street (Pl. B, 2, 3; *I*), one of the busiest streets in New York, leads E. to *Fulton Market* (fish, oysters, etc.) and *Fulton Ferry* (for Brooklyn) and W. to *Washington Market*, which may be visited for the sake of its wonderful display of fruit, vegetables, and other provisions.

At the S.W. corner of Fulton St. rises the tall and narrow office of the *Mail* and at the N.E. corner is the *National Park Bank* (Pl. B, 3; *I*). — Just above, on the right side of Broadway, is the lofty *St. Paul Building* (cor. of Ann St.), with its 26 stories (308 ft. high). Opposite, at the corner of Vesey St., is **St. Paul's Church** (Pl. B, 3; *I*), the oldest church-edifice in New York (1756).

The graveyard contains some interesting monuments (*Emmet*, the Irish patriot, monument to the S.E. of the church; *G. F. Cooke*, the actor), and in the portico at the E. end of the church (next Broadway) there is a memorial of *General Montgomery*, who fell at the storming of Quebec in 1775. The positions of the square pews in which George Washington and Governor Clinton used to sit, in the N. and S. aisles, are marked by tablets on the walls.

On the N. side of Vesey St., between Broadway and Church St., is the office of the *Evening Post* (long edited by Wm. C. Bryant).

Between Vesey and Barclay St. is the *Astor House* (p. 12), with an interesting collection of views of old New York in the basement.

Broadway now reaches the S. end of the open space known as *City Hall Park*, the site of the ancient 'Commons' or pasturage, in and around which stand several important buildings. In the apex between Broadway and *Park Row* (p. 38) is the **Post Office** (Pl. B, 3; *I*), a large Renaissance building, with a mansard roof (1875). Its four façades are respectively 290, 340, 130, and 230 ft. long. On the third and fourth floors are the *United States Courts*. Nearly

7 000 men are employed in the New York Post Office, and over 1,000,000,000 letters and other postal packets are annually dealt with (comp. p. 19). [A large new Post Office building is in contemplation.] — Behind the Post Office, to the N., is the —

***City Hall** (Pl. B 3, *I*; adm., see p. 28), containing the headquarters of the Mayor of Greater New York and other municipal authorities. It is a well-proportioned building of marble in the Italian style, with a central portico, two projecting wings, and a cupola clock-tower. Mr. Henry James speaks of its 'perfect taste and finish, the reduced, yet ample scale, the harmony of the parts, the just proportions, the modest classic grace, the living look of the type aimed at'. The architect was *John McComb*. The rear was built of free-stone, as it was supposed at its erection (1803-12) that no one of importance would ever live to the N. of the building.

The *Governor's Room* (open to visitors, 10-4), used for official receptions, contains the chairs used in the first U.S. Congress, the chair in which Washington was inaugurated as President, the desk on which he wrote his first message to Congress, Jefferson's desk, and other relics. Among the portraits are those of Hamilton, Lafayette (by Samuel F. B. Morse), and several governors of New York. Jefferson is commemorated by a statue, and Washington by a bronze replica of David d'Angers' bust. The room is to be restored to its original condition by a gift from Mrs. Russell Sage. The *Council Chamber* contains a large portrait of Washington, by Trumbull. The *City Library* (Room No. 10) has some valuable historical works.

To the N. of the City Hall is the **Court House** (Pl. B 3, *I*; 1861-67), a large building of white marble, with its principal entrance, garnished with lofty Corinthian columns, facing Chambers St. The interior, which contains the State Courts and several municipal offices, is well fitted up. The building, owing to the 'Ring Frauds' (p. 32), cost 12 million dollars (2,400,000*l*.). Opposite the Court House, in Chambers St., are various *City Offices*. These include the new **Register's Office or Hall of Records** (Pl. B, 3; *I*), a handsome building in the French Renaissance style, erected at a cost of $ 6,000,000 and faced with granite. The façade is adorned with sculptures by Martiny, Weinert, and Bush-Brown; and the interior is also elaborately decorated. — To the S.W. of the City Hall, facing Broadway, is a **Statue of Nathan Hale* (1755-76), a victim of the Revolution, by MacMonnies (1893).

To the N. of the Hall of Records, at the corner of Reade and Lafayette Sts. (Pl. B, 3; *I*), is the *Manhattan Water Tank* (now enclosed, but visible through the windows), built in 1799 by the Manhattan Water Co., of which Aaron Burr was president. The retention of the tank full of water is one of the conditions of the Charter of the Manhattan Bank.

Park Row (Pl. B, 3; *I*), bounding the S.E. side of the City Hall Park, contains the offices of many of the principal New York newspapers. The *Pulitzer Building*, with the *World Office* (Pl. B, 3; *I*), of brown stone, with a dome, is the tallest and largest of these, and a splendid *View of New York is obtained from the dome (310 ft.; elevator; adm., see p. 29; height to apex of lantern 375½ ft.). Next to it (to the S.) is the *Tribune Building* (Pl. B, 3; *I*),

of red brick with white facings and a clock-tower 285 ft. high. The *Potter Building* (Pl. B, 3; *1*) contains the office of the *New York Press*. The tall structure overtopping this is the building of the *American Tract Society* (Pl. B, 3; *1*), at the corner of Nassau and Spruce Sts. (23 stories, 306 ft. high; restaurant on the top floor, see p. 15). To the right of the Potter Building, opposite the S. apex of the Post Office, is the *Park Row Building* (30 stories; Pl. B 3, *1*), with its lofty towers (387 ft.; *View). It has 950 offices, occupied by about 6000 persons. Opposite the newspaper offices, in Printing House Square, is a bronze *Statue of Benjamin Franklin* (the tutelary deity of American journalism), by Plassman, and in front of the Tribune Building is a seated bronze figure, by J. Q. A. Ward, of its famous founder *Horace Greeley* (1811-72), erected in 1872.

The part of Park Row beyond this point, and the adjacent *Baxter St.* (the 'Bay'), are mainly occupied by Jewish dealers in old clothes and other articles. Park Row ends at Chatham Square, whence the *Bowery (Pl. C, D, 4, 3), named from the Dutch 'Boueries' or farms in this part of the town, runs N. to the junction of Third and Fourth Avenues (see p. 51). The Bowery is now full of drinking-saloons, dime museums, small theatres, and hucksters' stalls, and presents one of the most crowded and characteristic scenes in New York, though it is much less 'rowdy' than when Dickens described it in his 'American Notes'. Its residents are mainly Germans and Poles. At the *Bowery Mission* (No. 55, near Canal St.; Pl. C, 4) bread is distributed free to all-comers nightly at 1 a.m., and the 'Bread Line' often numbers 1500 persons. — Five Points (Pl. B, C, 3; *1*), the district (roughly speaking) between Park Row (S.E.), Centre St. (W.), and Grand St. (N.), once bore the reputation of being the most evil district in New York. Like the Seven Dials in London, it has, however, of late been wonderfully improved by the construction of new streets, the removal of old rookeries, and the invasion of commerce. It took its name from the 'five points' formed by the intersection of Worth (then Anthony), Baxter, and Park Streets; and here now stand the *Five Points Mission* and the *Five Points House of Industry* (visitors courteously received). Perhaps the most interesting parts of the district now are the Italian quarter in *Mulberry St.*, with its once famous 'Bend' (Pl. C 3, *1*; now a small public park), and Chinatown in *Mott St.* and *Pell St.*, the squalor of which presents some elements of the picturesque. The swinging lanterns and banners of Chinatown give a curiously oriental air to this part of the city. Visits may be paid to the *Joss House* at No. 16, and the *Chinese Restaurant* at No. 14 Mott St., to the *Theatre* at 18 Doyer St., and (in the company of a detective) to one of the *Opium Joints* (the last somewhat of a 'fake'). The *Ghetto Market* at *Seward Park* (Pl. C, 4), the centre of the quarter of the Russian and Austrian Jews, is also interesting. — In *New Chambers St.*, leading to the right from Park Row, is the *Newsboys Lodging House*, erected by the Children's Aid Society (founded by *C. Loring Brace* in 1853; offices in the United Charities Building, 105 E. 22nd St., p. 51), which has given shelter in the last 50 years to about 400,000 boys, at a total expense of about $ 550,000 (110,000*l.*). — On the E. side of City Hall Park are the starting-point of the City Hall branch of the Third Avenue Elevated Railroad (see p. 16) and the approaches to *Brooklyn Bridge* (p. 40). — At the junction of Pearl St. and Cherry St. (Pl. B, 4; *1*), below an arch of Brooklyn Bridge, is a tablet marking the site of the first Presidential mansion of *George Washington* (1789-90).

[It is believed that the small *Mulberry Bend Park* (see above) will be selected as the site of a large new *Court House* about to be erected by the City of New York. A new *Municipal Office Building* is to be erected at the corner of Chambers St. and Park Row.]

The great *Brooklyn Bridge (Pl. B, 3, 4, *1*; p. 16), connecting New York with Brooklyn (p. 74), was until the other day (comp. below) the largest suspension-bridge in the world and is equally interesting as a marvel of engineering skill and as a model of grace and beauty. Its New York terminus is in Park Row, facing the City Hall Park, where it has direct connection with the Elevated Railway (comp. p. 16), while the Brooklyn end is at Sands St. The bridge affords accommodation for two railway tracks (comp. p. 16), two carriage-roadways (now traversed by electric tramways; p. 18), and a wide raised footway in the centre. It was begun in 1870 and opened for traffic in 1883, at a total expense of nearly $ 15,000,000 (3,000,000*l.*). It was designed by *John A. Roebling* (d. 1869) and was completed by his son *Washington Roebling*. The toll for one-horse vehicles is 5 c.; pedestrians and bicycles pass free. The surface and elevated roads of Brooklyn cross the bridge to its New York terminus (fare to any part of Brooklyn 5 c.).

The total length of the bridge, including the approaches, is 5990 ft. (1⅛ M.); and the distance between the piers is 1595 ft. (main spans of Forth Bridge ca. 1700 ft.; Suspension Bridge over the Danube at Budapest 1250 ft.; Menai Suspension Bridge 580 ft.). The width is 85 ft., and the height above high-water 135 ft. The gigantic stone piers, rising 270 ft. above high-water, are built on caissons sunk upon the rocky bed of the stream, which is 45 ft. below the surface on the Brooklyn side and 80 ft. on the New York side. The bridge itself, which is entirely of iron and steel, is suspended from the towers by four 16-inch steel-wire cables, which are 'anchored' at each end by 35,000 cubic yards of solid masonry. The four cables contain 14,360 M. of wire, and their weight is about 3600 tons. The hanging cables attached to the large ones number 2172.

The bridge-trains annually convey about 60,000,000 passengers, and the trolley-cars about 50,000,000, while probably at least 5,000,000 more cross on foot. The *View from the raised promenade in the middle of the bridge is one which no visitor to New York should miss. To the N. is the E. River, with its busy shipping; to the S. is the Harbour, with the Statue of Liberty (p. 71) in the distance; to the W. is New York; to the E., Brooklyn. The view by night is very striking.

Three other bridges over the East River have recently been constructed or begun; but these may be all described more briefly, as, though worthy rivals of the Brooklyn Bridge as feats of engineering and for local traffic, they are of much less practical importance for the tourist. — The first of these, known as the **Williamsburg Bridge** (Pl. C, 4, 5), was constructed in 1896-1904, at a cost of about $ 11,000,000. It combines the suspension and cantilever principles and has almost the same span (1600 ft.) between towers as the Brooklyn Bridge. It is 118 ft. wide and 135 ft. above the water-level (at the centre), and has an extreme length, including approaches, of 7200 ft. (1¼ M.). It accommodates two railway-tracks, four tramway-lines, two roadways, two cycle-paths, and two footpaths. The towers, 333 ft. high, are of steel (like the rest of the bridge) and rest each on two piers. The bridge connects Delancey St., New York, with *Williamsburg* (Brooklyn), on Long Island. At the Williamsburg end of the bridge is an equestrian statue in bronze, by H. M. Shrady, of *Washington at Valley Forge* (comp. p. 186). — The **Manhattan Bridge** (Pl. C, B, A, 4, 5), begun in 1901 and probably to be finished in 1910, crosses from Canal St., New York, to Washington St., Brooklyn (comp. Plan at p. 75). It is also a steel suspension bridge, with a total length of 9900 ft. (nearly 2 M.) and a main span of 1470 ft. In height and width it resembles the Williamsburg Bridge. It will bear eight railway-tracks besides roadways and foot-

paths. Its estimated cost is $ 20,000,000. — The Blackwell's Island Bridge (Pl. I, 4, 5), also begun in 1901 and completed in 1908, is a cantilever bridge supported by six piers, two on each side of the river and two on Blackwell's Island (p. 71). Its total length is 7450 ft. (nearly 1½ M.), and the channel-spans are respectively 1182 ft. and 984 ft. in width. It will bear six railroad-tracks, two roadways, and two footpaths. The cost of this bridge was about $ 20,000,000. — A huge railway bridge is also in course of construction at *Randall's Island* (p. 71; Pl. N, O, 5), to connect the Penna. R. R. terminals at Long Island City (comp. p. 78) with the main line of the N. Y. N. H. & H. R. R.

The most prominent structures in the part of Broadway skirting City Hall Park are the *Postal Telegraph Building* and the *Home Life Insurance Co.* (Pl. B 3, *I*; No. 256), the latter a 16-story edifice of white marble, with a high-pitched, red-tiled roof. At No. 261 Broadway is the *Bureau of Municipal Research* (sec., Dr. W. H. Allen), organized in 1906 to coöperate with public officials in the promotion of efficient and economical government, and already doing much interesting and effective work. — The section of Broadway above the City Hall Park contains numerous railway-offices and wholesale warehouses of 'dry goods' (*i.e.* haberdashery, drapery, etc.). At the corner of Chambers St., to the right, is a large marble building erected for the mammoth firm of drapers, *A. T. Stewart & Co.* (Pl. B, 3; *I*), but now occupied by offices. To the left is the *Chemical National Bank* (No. 270), which, with a capital of but $ 3,000,000 (600,000*l.*), holds $ 39,000,000 (7,800,000*l.*) on deposit and has a surplus of $ 5,600,000. At No. 346 Broadway rises the *New York Life Insurance Office* (Pl. C 3, *I*; view from tower).

Two blocks to the right (E.) of this point, between Elm St. and Centre St., is the building known as the Tombs (Pl. C 3, *I*; shown by permit from the Department of Correction, 148 E. 20th St.), the city prison of New York. The original granite building, in a heavy but effective Egyptian style, has been taken down, and a new and more commodious structure has been erected in its place (1898-99). A flying bridge connects the prison with the *Criminal Courts* (Pl. C, 3; *I*), a large building to the N., with good mural paintings by E. S. Simmons and others. Adjoining the latter is a *Fire Station*.

Farther up Broadway the predominant warehouses are those of clothiers and furriers. The principal cross-streets are *Canal Street* (once the bed of a stream crossing the Island), *Grand Street* (see p. 25), and *Houston Street*.

On the S. side of *Bleecker Street*, which runs to the left (W.) from Broadway, just above Houston St., is the *Mills House No. 1* (Pl. h; D, 3), a 'philanthropic' hotel (architect, E. Flagg), somewhat similar in plan to the structures erected by Lord Rowton (d. 1903) in London. Visitors will find it interesting to inspect the large covered courts, wash-rooms, laundry, restaurant, etc. It contains 1500 bedrooms (20 c. per night). A companion building *(Mills House No. 2)* stands at the corner of Rivington and Clinton Sts. (Pl. D, 4), and *No. 3*, of a somewhat superior character, with 1875 bedrooms, was erected at the corner of Seventh Ave. and 36th St. in 1907. Near No. 2, at the corner of Rivington and Eldridge Sts., is the building of the *University Settlement Society*, with public halls, club-rooms, a circulating library, and a roof-garden. [Similar colonies are the *College Settlement* in Rivington St. (Pl. D, 4), and the *East Side House Settlement* at the foot of E. 76th St. (Pl. K, 5).]

To the right, opposite No. 745 Broadway, opens the wide Astor Place

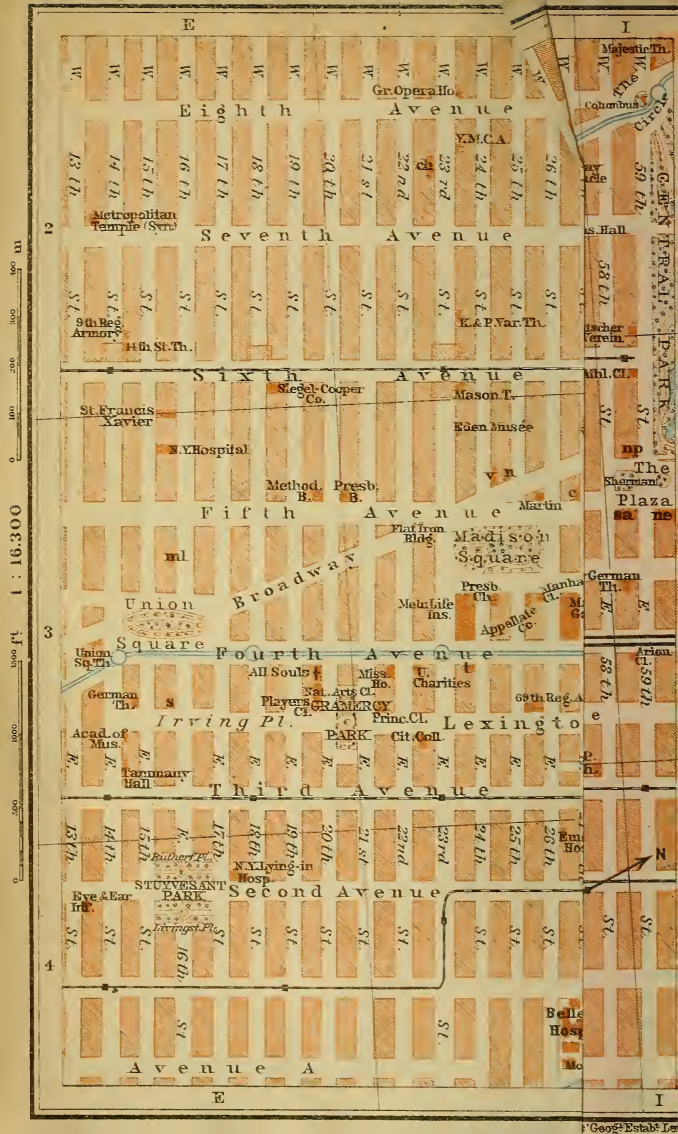
(Pl. D, 3), with the handsome building of the *Mercantile Library* (p. 25), completed in 1891. The library occupies the site of the old opera-house, in front of which, in 1849, took place the famous riot between the partizans of the actors Forest and Macready. It contains a large and handsome reading-room and possesses 260,000 volumes. — In *Lafayette Street*, which runs to the S. from Astor Place, is the ***Astor Library** (Pl. D, 3; adm., see p. 29), a large red structure with wings, containing about 600,000 volumes. It was originally founded in 1848 by John Jacob Astor, whose sons and grandsons added largely to his gift, the united benefactions of the family amounting to about $ 1,700,000 (340,000 *l.*). The Astor Library now forms one of the two reference branches of the *N. Y. Public Library* (see p. 47), which are used by about 200,000 readers annually. — Lafayette St. also contains the famous *De Vinne Press*, which produces some of the most artistic typography of America.

At the junction of Astor Place and Third Avenue stands the Cooper Institute or **Union** (Pl. D, 3), a large building of brown sandstone, founded and endowed in 1857 by Peter Cooper, a wealthy and philanthropic citizen, at a total cost of nearly $ 1,000,000 (200,000 *l.*). It contains a fine free library and reading-room, free schools of science and art (attended by 3500 students), and a large lecture-hall. The average daily number of readers is about 2000. The Sunday-evening lectures are attended by huge crowds. People's Symphony Concerts, at low prices, are a successful feature of the work. The Cooper Union also contains the *Museum for the Arts of Decoration* (adm., see p. 28). In front of the Cooper Union is a **Statue of Peter Cooper* (1791-1883; p. 78), by Aug. Saint-Gaudens (pedestal and canopy by Stanford White). — Opposite to the Cooper Union is the **Bible House** (Pl. D, E, 3), the headquarters of the *American Bible Society*, which has published and distributed 66,000,000 copies of the Bible or parts of it, in upwards of 240 different languages and dialects.

Beyond Astor Place Broadway passes (right) the large building occupied by *John Wanamaker* (p. 25), but originally erected for A. T. Stewart & Co. With its new annexes, it claims to be 'the largest departmental store in the world'. It has a direct entrance from the *Astor Place Subway Station* (p. 17). Broadway now inclines to the left. At the bend† rises ***Grace Church** (Pl. E, 3; Epis.), which, with the adjoining rectory, chantry, and church-house, forms, perhaps, the most attractive ecclesiastical group in New York. The present church, which is of white limestone and has a lofty marble spire, was erected in 1843-46 from the designs of *James Renwick, Jun.* The interior is well-proportioned (open daily, 9-5; good musical services), and all the windows contain stained glass. Behind the church, facing Fourth Ave., is the *Grace Memorial Home*, a day nursery for children. — At 14th St. Broadway reaches ***Union Square** (Pl. E, 3; *II*), which is beautified with pleasure grounds, statues, and an ornamental fountain. At the corner of E. 16th St. is the massive office-building of the *Bank of the Metropolis*. Near the S.E. corner is a good *Equestrian Statue of Washington*, by H. K. Brown; in the centre of the S. side is a bronze *Statue of Lafayette*, by Bartholdi; in the S.W. corner is a *Statue of Abraham Lincoln* (1865), by H. K. Brown; and on the W. side is the *James Fountain*, by Donndorf. *Henry George* died on Oct. 29th, 1897, in the Union

† This bend is said to have originated in the successfu attempt of *Hendrik Brevoort*, a Dutch tavern-keeper, to prevent the street being so laid out as to destroy a fine old tree that stood in front of his inn.

EAST BOSTON



E
I
Eighth Avenue
Gr. Opera Ho.
Y.M.C.A.
Majestic Th.
The Columbus Circle
13th
14th
15th
16th
17th
18th
19th
20th
21st
22nd
23rd
24th
25th
26th
59th
Metropolitan Temple (Syn.)
Seventh Avenue
58th
CENTRAL PARK
9th Reg. Armory
14th St. Th.
K.&P. Var. Th.
Sixth Avenue
Siegel-Cooper Co.
Mason T.
St. Francis Xavier
Eden Musée
N.Y. Hospital
Method. B.
Presb. B.
Martin
The Plaza
Fifth Avenue
Flat Iron Bldg.
Madison Square
Broadway
Union Square
Presb. Ch.
Metr. Life Ins.
Appellate Co.
German Th.
Union Sq. Th.
Fourth Avenue
All Souls
Miss. Ho.
U. Charities
Nat. Arts Cl.
Players Cl.
GRAMERCY PARK
69th Reg. A.
Irving Pl.
Princ. Cl.
Lexington
Acad. of Mus.
Cit. Coll.
Tammany Hall
Third Avenue
Rutherf. Pl.
N.Y. Lying-in Hosp.
STUYVESANT PARK
Second Avenue
Eye & Ear Inf.
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Square Hotel, on the E. side of the square (tablet), while engaged in a campaign for the mayoralty of New York. The pavement on the S. side of Union Sq., between Broadway and Fourth Avenue, used to be known as the 'Rialto', as the resort of actors in search of engagements, but the term is now applied to a part of Broadway to the N., between 23rd St. and 42nd St.

Fourteenth Street, which Broadway intersects at Union Sq., is one of the chief arteries of cross-town traffic (tramway), and the part to the W. of Broadway contains some of the busiest shops in the city. To the E., between Union Sq. and Third Avenue, are *Steinway Hall* (no longer used for concerts), the *Academy of Music* (Pl. E 3, *II*; p. 20), and Tammany Hall (Pl. E 3, *II*; 1867), the seat of the *Tammany Society*, which was established in 1789 for benevolent purposes, but soon developed into a strong political (Democratic) institution and is now the centre of the party of local politicians named after the building. The name is a corruption of that of Tamenund, a famous Indian seer (see 'The Last of the Mohicans', by *Fenimore Cooper*, chap. 28), and the officers of the society bear the Indian titles of sachems and the like. Its 'totem' or emblem is the tiger. — On the N. side of 14th St., to the W. of Sixth Avenue, is the *Armoury of the Ninth Regiment* (Pl. E, 2; *II*).

Broadway between Union Sq. and Madison Sq. (see below) is one of the chief shopping-resorts of New York, containing many fine stores for the sale of furniture, 'dry goods', etc. At 23rd St. it intersects Fifth Avenue (p. 45) and at the point of intersection stands the daring ***Fuller Building,** generally known as the **'Flat-iron Building'** (Pl. F, 3; *II*) on account of its strange triangular shape. It is 290 ft. high, has 20 stories, and cost (including site) $4,000,000. Seen from the N., as we look down Fifth Avenue, this building resembles the prow of a gigantic ship under way and is very impressive. The architects were *D. H. Burnham & Co.*, of Chicago.

This building has a curious effect in increasing the violence of the wind at its apex, so that, during a storm, people are sometimes whirled off the side-walk and plate-glass shop-windows shivered.

Broadway now skirts the W. side of ***Madison Square** (Pl. F, 3; *II*), a prettily laid out public garden, containing a bronze **Statue of Admiral Farragut* (1801-70), by Saint-Gaudens (N.W. corner), an obelisk to the memory of *General Worth* (1794-1849; W. side), a *Statue of Roscoe Conkling* (1829-88), by J. Q. A. Ward (S.E. corner), a statue of *President Arthur* (1830-86), by G. E. Bissell (N.E. corner), and a *Statue of William H. Seward* (1801-72), by Randolph Rogers (S.W. angle). The statue of Farragut is among the finest in New York, and the imaginative treatment of the pedestal is very beautiful. On the W. side of the square are the new *Fifth Avenue Building* and the *Hoffman House* (p. 12).

On the E. side (cor. of 25th St.) is the new ***Appellate Court House** (Pl. F, 3; *II*), a handsome building by J. B. Lord, perhaps somewhat overloaded with plastic ornamentation.

On the balustrade at the top are ten statues of the Great Lawgivers. The central group facing Madison Ave. represents Peace (by *Karl Bitter*), while the corresponding group towards 25th St. represents Justice (by *D. C. French*). The bas-relief in the pediment (Law vanquishing Anarchy) is by *Niehaus*. The seated figures of Wisdom and Force, at the entrance,

are by *Ruckstuhl*. The other sculptures include figures of the Periods of the Day and of the Seasons. — The Interior is also elaborately adorned with marble, gilding, oaken panelling, and mural paintings. The friezes in the Entrance Hall are by *Metcalf* (left), *Mowbray* (centre), and *Reid* (right). The panels in the Court Room are by *Simmons* (left), *H. O. Walker* (centre), and *Blashfield* (right); the friezes are by *Kenyon Cox*, *Lauber*, and *Maynard*.

On the E. side of the square, between 23rd and 24th Sts., is the enormous building of the *Metropolitan Life Insurance Co.* (Pl. F, 3; *II*), the tower of which has 50 stories and reaches a height of 693 ft. (726 ft. from the cellar floor; Washington Monument 555 ft., towers of Cologne Cathedral 511 ft.). Two of the elevators run to a height of 544 ft. (*View). Adjacent is the *Madison Sq. Presbyterian Church*, with its massive dome (Rev. Dr. Parkhurst). At the S.E. corner of 26th St. stands the *Manhattan Club* (p. 24), and at the N.E. corner is the huge *Madison Square Garden* (Pl. F 3, *II*; see p. 53).

Twenty-Third Street, to the W. of Broadway, is one of the chief shopping-resorts of New York, and its wide side-pavements are generally crowded with purchasers. Perhaps the most notable shop is the large and fashionable 'dry goods' store of *Stern Brothers* (No. 32). At the corner of Sixth Avenue (p. 54) is the imposing *Masonic Temple* (Pl. F, 2; *II*), containing a hall to seat 1200 persons. A large addition is going up in 24th St. Between Seventh and Eighth Avenues are the *Y. M. C. A.* (see below; N. side) and the lofty *Chelsea Hotel* (p. 12; S. side), and at the corner of the latter avenue is the *Grand Opera House* (Pl. F 2, *I*; pp. 21, 54). To the E. of Madison Sq. Twenty-Third St. runs down to the E. River.

The substantial building of the **Young Men's Christian Association** (Pl. F, 2; *II*), 215 W. 23rd St, was erected in 1903 at a cost, including site, of $ 750,000. The Young Men's Christian Association of the City of New York, organized in 1852 and incorporated in 1866, aims at the spiritual, mental, social, and physical improvement of young men by the support and maintenance of lectures, libraries, reading-rooms, social and religious meetings, evening-classes, gymnasiums, and athletic grounds, and by providing attractive places of safe evening resort. In addition to the above-mentioned structure the Association owns fifteen other buildings valued at nearly $ 2 000,000, including the large West Side Branch in W. 57th St. with the Association Library (50,000 vols.), and it also has the use of the Railroad Men's Building, erected by the late Mr. Cornelius Vanderbilt at a cost of about $ 225,000, of three other buildings for railway men, and of Earl Hall (p. 67), erected for the students of Columbia University by Wm. E. Dodge (1805-83) at a cost of $ 175,000. The work is carried on at thirty different points. The aggregate attendance at the rooms is about 2,000,000 a year, and strangers are always welcome as visitors. The average membership is 16.000; the annual expenses are nearly $ 400,000, less than one quarter of which is met by membership fees. — The aggregate membership of the Y. M. C. A. in the United States and Canada is about 440,000.

Between Madison Square and 42nd St. Broadway passes numerous theatres, which follow each other in rapid succession (see p. 20). In the same part of Broadway are many large and fine hotels. At 34th St. Broadway crosses Sixth Avenue, passing under the Elevated Railroad. The small open space here, with statues of *Horace Greeley* (p. 39) and *Wm. E. Dodge* (see above), is known as Herald Square. On the N. is the two-storied concrete building of the *New York Herald* (Pl. G, 2; *II*), in the basement of which the powerful Hoe printing-presses are seen at work. To the W., at the corner of 34th St., is *Macy's Departmental Store* (p. 25), an enormous building, with a large restaurant on the top floor. The new Pennsylvania

R. R. Station (p. 54) lies one block to the W. The **Metropolitan Opera House** (Pl. G 2, *II*; p. 20), opened in 1883 and rebuilt ten years later, after a fire, stands between 39th St. and 40th St. [The hall of the *Mendelssohn Glee Club* in 40th St., just to the W. of Broadway, contains some good mural paintings by Robert Blum (shown on application to the care-taker).] At the corner of 42nd St. stands the large *Knickerbocker Hotel* (p. 12). Seventh Ave. is crossed at 43rd St., and the space at the point of intersection, from which several old buildings have been removed, is known as Times Sauare (or *Longacre Square*), the centre of club- and theatre-land. In the middle stands the building of the *New York Times* (Pl. G,2; *II*), sometimes known as the 'Andiron' (comp. p. 43; architects, Eidlitz & Mackenzie). The tower (26 stories) is 363 ft. high. The outside walls are of pink granite and terracotta, and the interior is finely fitted up. Beneath it is a station of the New York Subway (p. 17). On the corner of 44th St. rises the huge *Astor House* (p. 12).

Beyond Times Square Broadway is rather uninteresting, but there are some lofty specimens of apartment-houses or French flats farther up. From 45th St. on Broadway is largely occupied by automobile stores and garages. At the corner of 56th St. is the new *Broadway Tabernacle* (Congregational; Pl. H 2, *II*), and at No. 1634 (r.) is the *American Horse Exchange*, the Tattersall's of New York. At 59th St. Broadway reaches the S.W. corner of Central Park (p. 55) and intersects Eighth Avenue. At the intersection, the so-called Circle, stands the **Columbus Monument** (Pl. I, 2; *II*), by *Gaetano Russo*, erected in 1892 (the 400th anniversary of the discovery of America) and consisting of a tall shaft surmounted by a marble statue (in all, 77 ft. high). [In 59th St., close to the Circle, is the pretty little *Bank of Discount.*] At 71st St. (r.) is the curious low *Church of the Blessed Sacrament* (Pl. K, 1; R. C.; Rev. Matthew A. Taylor). By the 72nd St. Station of the Subway (Pl. K, 2) is a *Statue of Verdi* (1813-1901), the composer, by Pasquale Civiletti. Between 73rd and 74th Sts. (l.) is the elaborate *Ansonia Apartment Hotel* (Pl. K, 1), and at the corner of 78th St., also to the left, is *The Apthorp* (Pl. K, 1), an enormous new apartment house. Beyond this point Broadway, now a wide street with rows of trees, is usually known as the *Boulevard*. From 108th St. to 162nd St. it coincides with Eleventh Avenue. At 116th St. it passes *Columbia University* (see p. 66). From 162nd St. Broadway *(Kingsbridge Road)* runs on to Yonkers (p. 86).

***Fifth Avenue** (Pl. D-P, 3), the chief street in New York from the standpoint of wealth and fashion, begins at *Washington Square* (p. 46), to the N. of West 4th St. and a little to the W. of Broadway, and runs N. to the Harlem River (p. 70), a distance of 6 M. Below 47th St. the avenue has now been largely invaded by shops, tall office-buildings, and hotels, and even between 47th St. and

Central Park (59th St.) there are many clubs and hotels. Beyond 59th St., however, it consists of handsome private residences, forming, perhaps, as imposing a show of affluence and comfort as is to be seen in any street in the world. The avenue has been kept sacred from the marring touch of the tramway or the elevated railroad, but it is traversed by a line of motor omnibuses (p. 18). The avenue is wide and well-paved; many of the buildings are of brown sandstone, thus giving parts of it a somewhat monotonous air. On a fine afternoon Fifth Avenue is alive with carriages and horsemen on their way to and from Central Park (comp. p. 55), and it is, perhaps, seen at its best on a fine Sunday, when the churches are emptying.

Washington Square (Pl. D, 3), pleasantly laid out on the site of an old burial-ground, contains a bronze *Statue of Garibaldi* (1807-82), by Turini. The tasteful Gothic building of *New York University*, erected on the E. side of this square in 1832-35, was demolished in 1894-95, and a large office-building was erected on its site, of which the upper floors only are reserved for academic purposes. Here are located the Law School, the Graduate School, the School of Commerce and Finance, and the School of Pedagogy, the last interesting as the first school of pedagogy in any university to be organized on an equal footing with the other faculties. [The main buildings of the University are now at University Heights (p. 73), easily reached by subway to 181st St. and by trolley; the medical department is in E. 26th St.] On the S. side of the square are the *Judson Memorial Buildings*, including a Baptist church. On the N. side is a row of substantial old-time residences, which still retain an air of undeniable respectability and present, perhaps, the most satisfying specimen of domestic architecture in the city. The *Washington Centennial Memorial Arch*, by Stanford White, spans the S. entrance of Fifth Ave. — *University Place*, skirting Washington Sq. on the E., runs to Union Sq. (p. 42).

Following Fifth Avenue to the N. from Washington Sq., we pass several substantial old residences and the *Lafayette-Brevoort House* (p. 12; cor. of 8th St.). At the corner of 10th St. is the Episcopal **Church of the Ascension*, with a large mural painting of the Ascension by La Farge (his masterpiece), fine stained-glass windows (by La Farge, Tiffany, and others), and other good works of art (printed description obtained from sexton). Between 11th and 12th Sts. is the *First Presbyterian Church*. Both churches are of brown stone, with square towers. In crossing the busy 14th St. (p. 42) we see Union Sq. (p. 42) to the right. At 16th St. is the *Judge Building*.

In 15th St., a little to the W. of Fifth Avenue, is the large building of the *New York Hospital* (Pl. E, 3; *II*); to the E. is the *Young Women's Christian Association*, in the rear of which (entr. in 16th St.) is the *Margaret Louisa Home* (p. 12). In 16th St., but extending back to 15th St., are the ornate *Church* and *College of St. Francis Xavier* (Pl. E, 2, 3; *II*), the American headquarters of the Jesuits (700 pupils).

At the right corner of 18th St. is the substantial *Constable Building*, with its marble-lined interior. At the S.W. corner of 20th St. (l.) is the *Methodist Book Concern* (Pl. E, 3; *II*), one of the largest bookhouses in the world; and at the N.W. corner is the so-called **Presbyterian Building* (Pl. F, 3; *II*), a dignified office structure by J. B. Baker. This section of Fifth Ave. is the district *par ex-*

cellence of the publishers and booksellers and contains several of the shops mentioned at p. 25. At 23rd St. (p. 44) the Avenue intersects Broadway and skirts Madison Sq. (see p. 43). To the right is the curious *Flat-iron Building* (p. 43). At 26th St. is the *Café Martin* (p. 14). At the corner of 29th St. is the *Marble Collegiate Church* (Pl. F 3, *II*; good music; vocal quartette), opposite which is the *Calumet Club* (No. 267). In 29th St., a little to the E., is the odd-looking *Church of the Transfiguration* (Pl. F, 3; *II*), popularly known as the 'Little Church round the Corner'† and containing a memorial window (by La Farge) to Edwin Booth, the actor (1833-93). At the S.W. corner of 30th St. is the handsome *Holland House* (p. 12). The *Knickerbocker Club* (p. 24) stands at the corner of 32nd St. (r.). The whole block between 33rd and 34th Sts., to the left, is occupied by the ***Waldorf-Astoria Hotel** (p. 12), a huge double-building of red brick and sandstone in a German Renaissance style. The restaurants and other large halls in the interior are freely adorned with mural paintings by American artists, among the best of which is the ceiling (by *Blashfield*) of the somewhat over-decorated ballroom in the Astoria. — At the corner of 34th St. is the large building of the *Knickerbocker Trust Co.*, opposite which is the spacious store of *B. Altman* (p. 25). At 35th St. (left) is the *New York Club* (p. 24), at 36th St. (l.) is the *Gorham Building*, with its projecting copper cornice, at 37th St. (S.E.) is the *Tiffany Building* (Pl. G 3, *II*; by McKim, Mead, & White; with the premises of the famous jeweller and goldsmith, and at 38th St. is the tall *Siebrecht Building*. No. 400 (l.) was the home of *Col. Ingersoll* (1833-99). The **Union League Club** (p. 24), the chief Republican club of New York, is a handsome and substantial building at the corner of 39th St. (1880 members).

Between 40th St. and 42nd St., to the left, on the site of the old reservoir of the Croton Aqueduct, stands the ***New York Public Library** (Pl. G, 3; *II*), a very dignified and imposing structure of white marble, designed by *Messrs. Carrère & Hastings*. The building, which was begun in 1902 and will be opened for use in 1911, is Renaissance in style, based upon classic principles but modern in character. It is 390 ft. long, 270 ft. deep, and 60-90 ft. high, and encloses two courts, each 80 ft. square. The rear elevation is in some ways more satisfactory than the façade, where the effect of the columns is impaired by the heavy horizontal lines. The main reading-room will seat 700-800 readers. Director, *Dr. John S. Billings.*

The New York Public Library was formed in 1895 by the consolidation of the Lenox and Astor Libraries and the *Tilden Trust*, the last consisting of about $ 2,000,000, bequeathed by Samuel J. Tilden in 1886 with his library of 20,000 volumes. In 1901 the New York Free Circulating Library, with its 11 distributing centres, was added as the beginning of a circulating

† So named because of the refusal of the rector of a neighbouring church to officiate at the funeral of Stoddard, the actor, and his reference of the applicant to the 'little church round the corner'.

department, and 9 other circulating libraries have since been absorbed. In 1901 also *Mr. Andrew Carnegie* offered a sum of $ 5,200,000 for the construction and equipment of free circulating libraries on condition that the City provide the sites and maintain them when built. The Lenox and Astor Libraries, forming the reference department, are still housed in their respective buildings (pp. 50, 41). This department contains 725,000 vols. and 300,000 pamphlets, and these are consulted at the rate of 900,000 vols. per year.

A little to the E. of this point, in 42nd St., is the *Grand Central Station* (pp. 10, 52). At the S.E. corner of 42nd St. rises the tasteful *Columbia Bank*. The **Temple Emanu-El** (Pl. G, 3; *II*), or chief synagogue of New York, at the corner of 43rd St., is a fine specimen of Moorish architecture, with a richly decorated interior.

In W. 43RD STREET, between Fifth and Sixth Avenues, to the right (N.), is the *Century Club* (Pl. G 3, *II*; p. 24; a Renaissance structure, with a loggia in the second story and ornamental iron-work over some of the windows. Adjoining the Century Club is the *New York Academy of Medicine* (Pl. G, 3; *II*), with a front of reddish-brown stone, in a semi-Egyptian style. Beyond this are the extensive quarters of the *Racquet Club* (p. 23). On the opposite side of the street is *The Renaissance*, a handsome and select apartment-house.

At the N.E. corner of 44th St. is *Delmonico's Restaurant* (p. 14), a substantial building with elaborate ornamention; and at the S.W. corner is *Sherry's* (p. 14), a rival establishment, equally patronized by the fashionable world (fine ball-room).

WEST 44TH STREET, between Fifth Avenue and Broadway, contains several buildings of note. These include, on the right, the *St. Nicholas Club* (p. 24; No. 7), the *Brearley School for Girls* (17), the *American Institute (Berkeley Lyceum;* 19-23), the *Harvard Club* (p. 24; 27), the *New York Yacht Club* (p. 23; No. 37; perhaps the most luxurious yacht-club in the world, but with a curious 'freak' of a façade), the *Hudson Theatre* (p. 21), and the *Criterion Theatre* (p. 21); on the left, *Sherry's* (see above), the *Mechanics' Institute* (p. 25; 16-24) the *Yale Club* (p. 24; 30), the *Bar Association Library* (42), and the *University of Pennsylvania Club* (44). In the Mechanics' Institute ('General Society of Mechanics and Tradesmen of the City of New York') is the very interesting *Mossman Collection of Locks & Keys* (open free on week-days, 9 a.m. to 8 p.m.).

Between 45th St. and 46th St. (r.) is the elaborately decorated *Church of the Heavenly Rest* (Pl. G, H, 3; *II*). Between 46th St. and 47th St., to the right, is the *Windsor Arcade*. At the N.E. corner of 47th St. is the house of *Miss Helen Gould*, daughter of Mr. Jay Gould. The *Collegiate Church of St. Nicholas* (Dutch Reformed; Pl. H 3, *II*), at the corner of 48th St., is one of the handsomest and most elaborately adorned ecclesiastical edifices in the city. It is in the 14th cent. or Decorated Gothic style and has a crocketed spire, 270 ft. high. Just below 50th St., on the right, is the *Democratic Club* (p. 24), the stronghold of Tammany (p. 43).

Between 50th and 51st Sts., to the right, stands ***St. Patrick's Cathedral** (R.C.; Pl. H 3, *II*), an extensive building of white marble, in the Decorated Gothic style, and the most important ecclesiastical edifice in the United States. It is 400 ft. long, 125 ft. wide, and 112 ft. high; the transept is 180 ft. across, and the two beautiful spires are 332 ft. high. The building, which was designed by *James Renwick*, was erected in 1850-79, at a cost of $ 3,500,000 (700,000*l.*).

The INTERIOR, which seems a little short in proportion to its height, is dignified and imposing, and the fact that all the windows are filled with good modern stained glass adds to the effect. The *Transepts* are shallow. The massive white marble columns supporting the roof are 35 ft. high. The altars and church-furniture are very elaborate. The *Lady Chapel*, abutting on Madison Ave., was added in 1903-7. — The centenary of the Roman Catholic bishopric of New York was celebrated in 1908.

Adjoining the cathedral, to the right, is the handsome *Union Club* (p. 24). Between 51st and 52nd Sts. (Pl. H, 3; *II*), to the left, are the two handsome brownstone mansions, built by the late Mr. W. H. Vanderbilt (d. 1885), and now occupied by *Mr. H. C. Frick* and *Mr. W. D. Sloane*. They are united by a connecting passage and adorned with exquisite bands and plaques of carving, which, however, are scarcely seen well enough to be properly appreciated. The railings which surround them are a fine specimen of metal work. The Indiana-stone house above these, at the corner of 52nd St., in a more varied and striking style, is the **Residence of Mr. W. K. Vanderbilt* (Pl. H, 3; *II*), by R. M. Hunt (p. 51). It resembles a French château of the transitional period (15-16th cent.). The carving on the doorway and window above it almost challenges comparison with the finest work of the kind in European churches. The adjoining house is that of *Mr. W. K. Vanderbilt, Jr.*, and at the N.E. corner of 56th St. is that of *Mr. A. G. Vanderbilt*. At the N.W. corner of 57th St. is the house of *Mrs. Cornelius Vanderbilt*, by George B. Post, a red brick edifice with grey facings in the French château style of the 16-17th cent., with a huge ball-room.

St. Thomas's Church (Epis.; Pl. H 3, *II*), at 53rd St., was burned in 1905 and is being rebuilt; two paintings by La Farge and an altar-piece by Saint-Gaudens were destroyed in the fire. To the left, at the corner of 54th St., is the *University Club* (adorned with carvings of the seals of eighteen American colleges), by McKim, Mead, & White. The library contains admirable mural paintings by Mr. H. S. Mowbray, adapted from Pinturicchio's work in the Borgia apartments of the Vatican. [At No. 4 W. 54th St. is the New York home of *Mr. John D. Rockefeller.*] At the corner of 55th St. are the *St. Regis Hotel* (p. 12; r.) and the *Gotham Hotel* (p. 12; l.). The *Fifth Avenue Presbyterian Church* (Pl. H 3, *II*; N.W. cor.) has one of the loftiest spires in the city.

Fifty-Seventh St., both to the E. and W. of Fifth Avenue, contains several very striking façades, which the student of modern domestic architecture should not fail to see. Other interesting windows, porches, and gables may be seen in 34th, 36th, 37th, and other streets near Fifth Avenue.

At 59th St. (Pl. I, 3; *II*), where Fifth Avenue reaches Central Park (p. 55), are three huge hotels: the *New Plaza* (p. 12; l.), the *Savoy* (p. 12; r.), and the *Netherland* (p. 12; r.). In the middle of the 'Plaza' rises a bronze-gilt equestrian **Statue of General Sherman* (1820-91; see pp. 571, 609), by Aug. Saint-Gaudens (1903; a figure of 'dauntless refinement', says Mr. Henry James).

In *59th Street*, facing Central Park, are the *De la Salle Institute*, the *Deutscher Verein* (German Club; Pl. I 2, *II*), the *Catholic Club*, and the *Navarro* or *Central Park Apartment Houses*, named after Spanish cities.

Between 59th and 110th Sts. Fifth Avenue skirts the E. side of Central Park, having buildings on one side only. Among these, many of which are very handsome, are the *Metropolitan Club* (Pl. I, 3), at the corner of 60th St.; the *Gerry House*, cor. of 61st St.; the twin white houses of *Mr. John Jacob Astor* and *Mrs. Wm. Astor, Sen.*, N.E. corner of 65th St.; the *Havemeyer House*, corner of 66th St.; the *Yerkes House*, with its fine picture-gallery (p. 22), S.E. corner of 68th St.; the *Synagogue Beth-El* (Pl. K, 3), corner of 76th St.; the *Brokaw House*, corner of 79th St.; the *Phipps House*, corner of 88th St.; the *House of Mr. Andrew Carnegie*, with its garden, at the corner of 91st St.; and the *Mt. Sinai Hospital* (Pl. M, 3), between 100th and 101st Sts.

Between 70th and 71st Sts. is the ***Lenox Library** (Pl. I, K, 3), built and endowed by *Mr. James Lenox* (1800-1880), who also presented the ground on which it stands and most of its contents, The building, erected in 1870-77, is of light-coloured limestone. with projecting wings. Adm., see p. 29.

The Library proper consists of about 125,000 volumes. It is rich in American history (including the library of George Bancroft, the historian; comp. p. 240). musical works (largely bequeathed by Mr. J. W. Drexel), Bibles, and Shakspeariana. It is a free reference-library, now forming part of the New York Public Library; and its contents will eventually be removed to the new building (p. 47).

The *Vestibule* and *Central Hall* (groundfloor) contain, under glass, collections of books and MSS. belonging to the library and frequently changed. Among the chief treasures are 15 *Block Books;* the *Mazarin Bible* (Gutenberg & Fust, ca. 1455; prob. the first book printed with movable types); *Coverdale's Bible* (1535); *Tyndale's Pentateuch* (1530) and *New Testament* (1536); *Eliot's Indian Bible;* first editions of most English authors of importance before the 18th century; two copies of the *First Folio Shakspeare* (1623), and also copies of the *Second*, *Third*, and *Fourth Folios* (1632, 1663-64, 1685); eight works from the press of *William Caxton* (1475-90); the *Bay Psalm Book*, the first book printed in the United States (Cambridge, 1640); the *Doctrina Christiana*, printed in Mexico in 1544; a magnificent vellum MS. lectionary of the Gospels, with illuminations and miniatures by *Giulio Clovio;* the original MS. of *Washington's Farewell Address;* and various books, MSS., and maps relating to the discovery of America. The vestibule also contains most of the Sculptures belonging to the library, including works by *Hiram Powers* (No. 14) and *Gibson* (15) and four ancient Roman busts.

The Picture Gallery, on the first floor, comprises works by *A. de Sarto*, *F. E. Church*, *A. Bierstadt*, *Sir David Wilkie*, *Constable*, *Morland*, *Raeburn*, *Meissonier*, *Munkacsy*, *Reynolds*, *Verboeckhoven*, *Gilbert Stuart*, *R. Peale*, *Landseer*, *Horace Vernet*, *Copley*, *Gainsborough*, *Turner*, *Zamacois*, etc. — The picture-gallery also contains works by *Sir John Steel* (Nos. 12, 13), *Gibson* (15), and *Barrias* (8) and a few other sculptures.

The ***Stuart Collections**, bequeathed by *Mrs. Robert L. Stuart* (d. 1892), along with a sum of $ 300,000, occupy a gallery over the N. wing. They include a library of 10,000 vols. and 240 modern paintings, comprising works by *Gérôme*, *Corot*, *Rosa Bonheur*, *Troyon*, *Meissonier*, *Detaille*, *Bouguereau*, *Vibert*, *Diaz*, *Munkacsy*, *Brozik*, *Clays*, *Koekkoek*, *Verboeckhoven*, *Knaus*, *Meyer von Bremen*, *Cropsey*, *Kensett*, *Church*, *Cole*, *Inness*, *J. A. Walker*, etc.

The mezzanine floor is devoted to the large and valuable collections of **Prints and MSS.** The MSS. include the *Emmett Collection of MSS.*,

comprising about 10,000 MSS. relating to American history (1750-1800); the *Bancroft MSS.*; the *Hardwicke MSS.*; and the Spanish-American MSS. from the *Ternaux* and *Kingsborough Collections*. The prints include the *Samuel P. Avery Collection* (18,000 prints), consisting mainly of French and other modern etchings and lithographs; a large collection of *Modern American Works*; a representative collection of *Japanese Colour Prints*; and many portraits, views, and historical prints arranged according to subjects. Exhibitions are held regularly in the Print Galleries.

In Fifth Avenue, opposite the Lenox Library, is the *Memorial to R. M. Hunt* (pp. 49, 58), the architect, designed by D. C. French. It consists of a semicircular bench, recessed in the wall of Central Park, with a bust of Hunt and graceful female figures.

In Central Park, close to Fifth Avenue at 82nd St., is the *Metropolitan Museum of Art* (p. 58).

At 120th St. Fifth Avenue reaches Mount Morris Square (Pl. O, 3), the mound in the centre of which commands good views. Beyond Mt. Morris Sq. the avenue is lined with handsome villas, some of them surrounded by gardens. It ends, amid tenements and small shops, at the Harlem River (140th St.; Pl. P, 3).

Fourth Avenue diverges from Third Avenue at the N. end of the Bowery and at first runs N. towards Union Sq. (p. 42), passing the Cooper Institute (p. 42) and the Bible House (p. 42). At Union Sq. it turns N.E. At the corner of 17th St. (S.E.) is the house in which *William Lloyd Garrison* (pp. 258, 283) died (tablet), at 20th St. (r.) is *All Souls Unitarian Church* (Pl. E, 3; *II*), and at 21st St. is *Calvary Church*. The group of notable buildings at the intersection of 22nd St. (Pl. F, 3; *II*) includes the *Church Mission House* (S.E.), the *United Charities Building* (N.E.; by Jas. B. Baker), the tasteful *Bank for Savings* (S.W.), and the *Fourth Ave. Presbyterian Church* (N.W.). The United Charities Building was presented by Mr. John S. Kennedy to the Children's Aid Society (p. 39), the N.Y. City Mission & Tract Society, the Association for Improving the Condition of the Poor, and the Charity Organization Society. At the N.W. corner of 23rd St. is an ornate office-building, forming an expansion of that of the Metropolitan Life Insurance Co. (p. 44). — At 27th St., to the left, extending back to Madison Avenue, is *Madison Square Garden* (p. 53). To the right, at 33rd St., stands the huge *Armoury of the 71st Regiment* (Pl. F, G, 3; *II*), National Guard of New York, burned down in 1902 but since re-erected; and to the left is the *Park Avenue Hotel* (p. 13). At 34th St. Fourth Avenue assumes the name of ***Park Avenue.** The Fourth Avenue tramway line is here relegated to a subway below the street, and the ventilating openings are surrounded with small gardens which give a cheerful and pleasant air to the thoroughfare, here 140 ft. wide. Below the tramway-subway is the tunnel of the New York Subway (p. 16), and below that again is the tunnel constructed by the Pennsylvania

R. R. Co. across New York and connecting with tunnels under the Hudson River (see p. 54) and the E. River. On the W. side of the avenue stands the Unitarian **Church of the Messiah* (34th St.; Pl. G 3, *II*). At 40th St. is the *Murray Hill Hotel* (pp. 12, 13).

This part of Park Avenue traverses the aristocratic quarter of Murray Hill, bounded by Third and Sixth Avenues, 32nd St., and 45th St. The Murray Mansion, which gave name to the district, has disappeared; but a tablet in the small garden (see p. 51) near 37th St. commemorates its mistress, *Mrs. Lindley Murray*.

At 42nd St. Park Avenue is interrupted by the **Grand Central Station** (Pl. G 3, *II*; p. 10), the main building of which, practically rebuilt in 1900, occupies the whole area between the lines of Park Avenue, Vanderbilt Avenue, 42nd St., and 45th St.

This enormous railway-station, constructed of steel, with grey stucco façades, is nearly 700 ft. long and 240 ft. wide, and is covered with an iron and glass roof, 110 ft. high, with a span of 200 ft. The above dimensions are exclusive of an addition to the E. of the line of Park Avenue, used by incoming trains. The large new waiting-hall is handsome and most conveniently arranged. About 350 trains (1400 cars) arrive at and leave the station daily. It contains 19 tracks, 12 for outgoing and 7 for incoming trains, all now operated by electricity as far as High Bridge (p. 70) and Mt. Vernon (p. 228).

For the next ten blocks or so Park Avenue, or what would otherwise be Park Avenue, is occupied by the various lines of railway issuing from the Grand Central Station, but at 49th St., the avenue begins to re-assert itself, and higher up the railway burrows underneath through a series of tunnels. Above 57th St., where the street is very wide, Park Avenue may claim to be one of the finest thoroughfares of New York, and here, as lower down, the openings of the tunnels are pleasantly hidden by small gardens. At the corner of 59th St., to the right, rises the large yellow building of the *Arion* (Pl. I 3, *II*; p. 24). Among the numerous lofty piles of flats is the *Yosemite*, at the S.W. corner of 62nd St. Between 66th and 67th Sts., to the right, is the large **Armoury of the Seventh Regiment** (Pl. I, 3), the fashionable regiment of New York. The armoury is very finely fitted up; the huge drill-hall is 300 ft. long and 200 ft. wide. At the adjacent corner is the *Hahnemann Hospital*. The **Normal College** (Pl. I, 3), between 68th and 69th Sts., is a spacious building in an ecclesiastical Gothic style, with a lofty square tower (2900 female pupils). To the left are the new *Union Theological Seminary* (Pl. 19; O, 1) and (70th St.) the *Presbyterian Hospital*, an effective building, extending back to Madison Ave. (see p. 53). The **Freundschaft Club*, at the S.E. corner of 72nd St., has an interior fitted up in a style worthy of its fine exterior. At the corner of 77th St. is the *German Hospital* (Pl. K, 3). Another great **Armoury* (8th Regiment; Pl. L, 3) crowns the hill at 94th St.; it is an enlarged copy of the Château of St. André at Villeneuve (Avignon). The avenue reaches the Harlem River at 134th St., near the bridge of the Hudson River Railway.

Lexington Avenue, beginning at Gramercy Park (Pl. E, F, 3; *II*)

and running N. to the Harlem River (131st St.) between Third and Fourth Avenues, also contains a number of large and important buildings. Among these are the old building of the *College of the City of New York* (Pl. F, 3; *II*), at the corner of 23rd St. (new building, see p. 69); the *Armoury of the 69th Regiment*, at the corner of 25th St.; the *Hospital for Cripples* (Pl. G, 3; *II*), 42nd St.; the *Association for the Improved Instruction of Deaf-Mutes*, at the corner of 67th St.; the *Hydriatic Institute*, at the corner of 72nd St.; and the *Synagogues* at the corners of 55th, 63rd, and 72nd Sts.

Between Fourth and Fifth Avenues, runs ***Madison Avenue**, beginning at Madison Sq. (p. 43) and ending at 138th St. on the Harlem River. Hitherto almost uninvaded by shops, it forms one of the finest streets of private houses in New York, rivalling even Fifth Avenue. At the beginning of the avenue, at the N.E. corner of the square and occupying a whole block, is **Madison Square Garden** (Pl. F, 3; *II*), a huge erection 425 ft. long and 200 ft. wide (see p. 21). The building includes the *Garden Theatre* (p. 21). The tower (adm., see p. 29) is a copy of the Giralda at Seville; at the top is a figure of Diana, by Saint-Gaudens. At No. 219 Madison Ave., cor. of W. 36th St., is the brown stone house of *Mr. J. Pierpont Morgan* (art-gallery, see p. 22), adjoined by his library, a well-designed building in the Italian Renaissance style (good decorations by H. Siddons Mowbray), containing a priceless *Collection of books, prints, and MSS. (admission by special introduction only). (At No. 25 W. 39th St. is the *United Engineering Building*, Pl. F 3, *II*.) Madison Avenue crosses 42nd St. just above the Grand Central Station (p. 52) and beyond this point is traversed by tramway-cars. At 44th St. is the *Church of St. Bartholomew* (Pl. G, 3; *II*), in the Italian style, with elaborate bronze doors presented by Mrs. Cornelius Vanderbilt, and at 45th St. is the *Railroad Branch of the Y. M. C. A.* (p. 44). At 50th St., at the back of St. Patrick's Cathedral (p. 48), is the *House of the Archbishop of New York* (R. C.). At 70th St. is the *Presbyterian Hospital* (p. 52). At the N.W. corner of 72nd St. rises the **Tiffany House* (Pl. K, 3), by McKim, Mead, & White, a picturesque edifice, containing an interesting collection of objects of art (adm. only by private introduction).

The remaining avenues which traverse Manhattan Island from S. to N. do not demand a detailed description. **First, Second, and Third Avenues** consist mainly of tenement houses and small retail-shops, while the amenity of the last two is not enhanced by the elevated railroads which follow their course. In First Avenue, between 27th and 28th Sts., is the *Medical School of Cornell University* (p. 145). Second Avenue is not joined by the railway till 23rd St. (see p. 16). At 13th St. is the *Eye & Ear Infirmary* (Pl. E, 4; *II*). At E. 15th St. the avenue crosses STUYVESANT PARK (Pl. E, 4; *II*), with the large *Church of St. George* (polychrome interior). This was long the aristocratic centre for New Yorkers of Dutch descent. At 17th St. is the *Lying-in Hospital* (Pl. E, 4; *II*). — At the corner of Third Avenue and 11th St. is the *Court for Juvenile Offenders*, an interesting experiment begun in 1902. About 8000 children pass through this court yearly.

[*St. Mark's Church*, in Stuyvesant Place, leading from E. 10th St. to Astor Place, stands near the site of the 'Bowerie' or farm-house (comp.

p. 39) of Governor Stuyvesant (p. 32) and contains his tombstone (E. wall; from an older chapel) and other old monuments. *Governor Stuyvesant's Pear Tree*, which he planted in 1644 as a memorial 'by which his name might still be remembered', stood for 200 years at the N.E. corner of Third Ave. and 13th St. (memorial tablet).]

At the foot of E. 28th St., a little to the E. of First Avenue, is the extensive **Bellevue Hospital** (Pl. F, 4; *II*); and in the same street, to the W. of Third Avenue, is *St. Stephen's* (R.C.), containing some good paintings and an elaborate altar-piece. — At the foot of 66th St. is the *Rockefeller Institute for Medical Research* (Pl. I, 4), endowed by Mr. John D. Rockefeller with $ 4,000,000 to promote discovery in medical science for the alleviation of suffering in man and animals (Dr. Simon Flexner, Scientific Director). It occupies part of the old Schermerhorn farm.

Sixth Avenue, the route of a W. side elevated railway, begins at Carmine St., to the S.W. of Washington Square, and ends at Central Park (59th St.). It is one of the chief seats of retail trade in New York, containing several of the largest 'dry goods' and other shops, among them the enormous premises of the *Siegel-Cooper Co.* (Pl. E 2, *II*; between 18th and 19th Sts.). Its prolongation beyond the park is known as *Lenox Avenue*. Among the chief buildings it passes are the *Jefferson Market Police Court* (seat of the 'Night Court', open from 9 p.m. to 3 a.m.), at 10th St., the *Greenwich Savings Bank*, at 16th St., and the *Masonic Temple*, cor. of 23rd St. (p. 44). At the S.E. corner of 23rd St. is a tablet to *Edwin Booth* (p. 24), marking the site of his theatre. Statue of *Horace Greeley*, at the intersection of Broadway, see p. 44. At 41st St. the avenue skirts the pretty little *Bryant Park* (Pl. G, 3; *II*), with a statue of *Dr. J. Marion Sims* (1813-83) and a colossal bust of *Washington Irving* (p. 33). W. 53rd St., between Sixth and Ninth Avenues, may be described as the Negro Bohemia of New York, containing various clubs and restaurants.

The lower part of Seventh Avenue calls for no special mention. In the block enclosed by Seventh and Eighth Avenues, 31st St., and 33rd St., is situated the enormous new **Pennsylvania Railroad Station** (Pl. F, G, 2; *II*), a rectangle measuring 780 ft. by 430 ft. Architects, McKim, Mead, & White. The main entrance is in Seventh Avenue. The railway tracks are 40 ft. beneath the street-level and much of the station is also below ground. This station is connected with a system of tunnels, 5½ M. in length, extending from New Jersey under the Hudson River (two tubes, each 1¼ M. long), across Manhattan (3¼ M.; comp. Pl. F 1 and Map at p. 72), and under the E. River (four tubes, each 1 M. long) to Long Island (Pl. F, G, 2-5), and so forming the final link in an uninterrupted line of railway along the E. coast of America from Maine to Florida. The tunnels will probably be completed by 1910, at a cost of at least $ 100,000,000. Other large buildings in Seventh Avenue are the *State Arsenal*, at the corner of 35th St., and the *Carnegie Music Hall* (Pl. H 2, *II*; comp. p. 22), at the corner of 57th St. In W. 42nd St., near Seventh Ave., is the *New Amsterdam Theatre* (p. 20), with sculptures on its façade.

The foot of **Eighth Avenue** is also featureless. At the corner of 23rd St. is the *Grand Opera House* (Pl. F 2, *II*; p. 21). The part of the Avenue skirting the W. side of Central Park, and known as *Central Park West*, has many large apartment houses, fine churches, and other important buildings. At the corner of 62nd St. is the so-called *New Theatre* (p. 21; by Carrère & Hastings), at 63rd St. is the red brick structure of the *Ethical Culture School*, at 65th St. is *Holy Trinity Church* (Lutheran), and at 68th St. is the white marble *Church of the Christian Scientists*. At the corner of 72nd St. are the *Majestic Hotel* (p. 13) and the *Dakota Flats* (Pl. K, 2), conspicuous in many views of the city. Between 75th and 76th Sts. is the *Church of the Divine Paternity* (Universalist). — Between 76th and 77th Sts. is the new building of the New York Historical Society (Pl. K, 2), founded in 1804 (adm., see p. 29), which contains the *Lenox Collection of Assyrian Marbles*, from Nineveh, a *Library* of 120,000 vols., mainly relating to the history of America, the *Abbott Collection of Egyptian Antiquities* (incl. three mummies of the Sacred Bull), and a *Gallery of Art* (about 900 works). Among the

pictures worthy of note are examples of Largillière, Chardin, Greuze, Rigaud, Ph. de Champaigne, Hobbema (?Landscape), G. Poussin, J. van der Meer, Eeckhout, Victors, Brouwer, Teniers, Snyders, Mazzolini (St. Jerome), Bramantino (Crucifixion), Roger van der Weyden (?Crucifixion), and a pupil of Leon. da Vinci (Madonna). There are also numerous *Portraits.* — Above Central Park Eighth Ave. is traversed by the elevated railroad, which follows **Ninth Avenue**, which is named **Columbus Avenue** between 59th and 110th Sts. In Ninth Ave., near 20th St. (Chelsea Sq.), is the extensive building of the *Protestant Episcopal Theological Seminary;* at 34th St. is the *New York Institution for the Blind;* and at 59th St. are the large *Roosevelt Hospital* (Pl. I, 2) and the *Church of the Paulist Fathers.* Between 77th St. and 81st St. Ninth Avenue skirts *Manhattan Square* (Pl. K, 2), a bay of Central Park, with the Natural History Museum (p. 56). — **Tenth Avenue**, which takes the name of **Amsterdam Avenue** at 59th St., contains few buildings of note. In W. 59th St., just to the E. of the avenue, is the *College of Physicians and Surgeons* (p. 67). In W. 65th St., near Amsterdam Ave., is the *High School of Commerce.* At the corner of 109th St. is the **National Academy of Design** (Pl. N, 2), one of the chief art-institutions of the United States, corresponding with the 'Academy' in London, and like it consisting of Academicians (N. A.) and Associates (A. N. A.). The Schools of Art attract numerous pupils and do excellent service (comp. p. 67). Exhibitions, see p. 22. Behind the Academy of Design is the *Hospital for Women.* For other buildings in the N. part of the Avenue, see p. 69.

The great promenade and open-air resort of New York is ***Central Park** (Pl. I-N, 2, 3), occupying the centre of Manhattan Island, between 59th and 110th Sts., covering 840 acres of ground, and 2½ M. long by ½ M. wide. It was designed in 1858 by *Messrs. Vaux* and *Olmsted*, and cost about $15,000,000 (3,000,000 *l.*). The ground was originally a tract of swamp and rock, and its transformation into so beautiful a park is an important monument of American skill and perseverance.

Central Park differs from most English parks in substituting a multiplicity of small picturesque scenes for broad expanses of turf and simple groves of great trees. The park is practically divided into two distinct portions by the *Croton Reservoirs*, 143 acres in extent. Four concealed transverse-roads (65th, 79th, 85th, and 97th Sts.), passing under or over the park drives and walks by arches of masonry, enable ordinary traffic to cross the park without annoyance to visitors. The park is enclosed by a low cut-stone wall and has 20 entrances. The fashionable time for driving and riding is in the afternoon from 4 to 7, and the 'Corso' here almost challenges comparison with that in Hyde Park. The S. side of the park may be reached by the Sixth Avenue Elevated Railroad, by the Fifth Avenue omnibuses, and by several lines of tramway; and points higher up may be reached by the tramway-lines on Fourth and Eighth Avenues, while the elevated railroads on Third and Ninth Avenues pass within a block or two. Park Carriages (automobiles) start from the Fifth Ave. entrance and take visitors through the park to Grant's Tomb (25 c. each), and from the Eighth Ave. entrance for the tour of the park (25 c.), with the privilege of alighting at any point and completing the round in another carriage. The 'Seeing New York' automobiles (p. 19) pass through Central Park on their uptown trip. Meals may be had at the *Casino* (near the Mall) and at *M'Gown's Pass Tavern* (N. end), and light refreshments at the *Dairy* and at the foot of the *Terrace Steps.*

The chief promenade is the **Mall** (Pl. I, K, 3), near the Fifth Avenue entrance, which is lined with fine elms and contains several statues and groups of sculpture, including Shakspeare, Scott, Burns, Halleck (p. 242), Columbus, and the Indian Hunter. Near its N. end

is a music-stand (concerts, see p. 22). From the **Terrace*, at the N. end of the Mall, flights of steps descend to the *Bethesda Fountain* and to the *Lake*, used for boating in summer (boat 25 c. per ½ hr., with boatman 50 c.; trip in launch 10 c.) and skating in winter. The most extensive *View in the Park is afforded by the *Belvedere*, which occupies the highest point of the *Ramble*, to the N. of the lake. The *N. Park*, beyond the Croton Reservoir, has fewer artificial features than the S. Park, but its natural beauties are greater, and the *Harlem Mere* (12 acres) is very picturesque. About 300 yds. from the lake are the large green-houses. The vicinity of M'Gown's Pass (p. 55) was fortified both in 1776-83 and 1814, and a block-house of 1814 is still extant near the 110th St. entrance (Pl. N, 2). Near the S.E. corner of the park (nearest entrance in 64th St.) are the *Old State Arsenal* and a small *Zoological Garden*, the collection in which is apt to be largest in winter, when various menageries temporarily deposit their animals here. On the W. side of the park is the *American Museum of Natural History* (see below), and on the E. side is the *Metropolitan Museum of Art* (see p. 58). To the W. of the latter museum rises **Cleopatra's Needle*, an Egyptian obelisk from Alexandria, presented by Khedive Ismail Pasha to the City of New York in 1877. Like the companion obelisk in London, this monolith was originally brought from Heliopolis (On), where it was erected and inscribed by Thutmosis III. about 1500 B.C. One of the faces also bears inscriptions added by Ramses II. three centuries later (about the time of Moses). The obelisk is of red syenite, is 69 ft. high, and weighs 200 tons. The bronze crabs at the base are modern reproductions (comp. p. 59). Among the other monuments in the park are statues of Webster, Bolivar, Hamilton, and Morse, allegorical figures of Commerce and the Pilgrim, and several busts and animal groups. Just outside the park, beside the Sixth Ave. entrance, is a statue of Thorvaldsen.

In Manhattan Sq. (p. 55), on the W. side of Central Park, between 77th and 81st Sts., stands the **American Museum of Natural History* (Pl. K, 2), which was incorporated in 1869. The present buildings, erected in 1877-89, 1889-93, 1899, and 1907-8, form part of a group which is intended eventually to occupy the entire area (about 18 acres) between Central Park West, Columbus Ave., 77th St., and 81st St. The present entrance is on the S. side of the building (adm., see p. 29). The Museum received its charter from the State of New York, but the ground and building belong to the City of New York, while the current expenses are defrayed by the City, the Trustees, and private subscriptions. The growth of the Museum has been very rapid, and its collections are now very extensive and valuable. It owes large benefactions to private individuals, particularly to Mr. Morris K. Jesup (d. 1908; bequest of

$1,000,000, besides gifts during life), Mr. J. Pierpont Morgan, and other past and present members of the Board of Trustees. The interior is admirably arranged and lighted. There is no general handbook or catalogue, but the objects are all labelled, and a large diagram at the entrance of each room shows its contents and arrangement. Lavatories in the basement. There is a restaurant on the gallery floor, at the head of the E. staircase (comp. also p. 14).

A notable feature of the Museum's activity is the series of lectures delivered in the large *Lecture Hall* (ca 1500 seats) on the groundfloor. Free lectures, illustrated by stereopticon views, are delivered here to the schoolchildren of New York City. Other free courses of lectures are given to the scientific and general public.

Ground Floor. We first enter a hall or foyer containing *Meteorites* (including one from Greenland weighing 36½ tons, the largest in the world), an installation representing the *Solar System*, and *Busts of Men of Science*. In the corridor to the E. (r.) are large *Globe Maps of the Arctic and Antarctic Regions*, while in that to the W. is a collection of *Totem Poles* (p. 679). — The E. Hall is occupied by the fine **Jesup Collection of North American Woods*, including photographs of the growing trees, maps of their habitats, and beautiful water-colour paintings of their leaves, flowers, and fruit. Here also is the *Jesup Collection of Building Stones*. — The specimens of the Big Tree and the Redwood of California are exhibited in the adjoining Corner Hall, which also contains the **Corals*, *Sponges*, *and Mollusks* and other Invertebrates. — The N. Hall contains part of the **Anthropological* and **Ethnographical Collections*, among which may be mentioned the objects brought from Alaska and British Columbia by the Jesup North Pacific Expedition, and the Emmons and Terry collections, the Esquimaux collections, the wood-carvings of the Kwakiutl Indians, and the large warcanoe from Queen Charlotte Island. — Among the contents of the W. Hall are the groups and objects illustrating the life and customs of the Indians of the plains of N. America and the tribes of S. E. Siberia.

Main Floor. Ascending by the W. staircase, we first enter (right) the W. Hall, which carries on the *Ethnological Collections* (Indians of California, Mexico, and S.W. States). Noteworthy are the baskets and pottery (prehistoric and modern) and the turquoise collections of the Pueblo Indians. The contents of the adjoining Corner Hall illustrate *Indian Archaeology*, including the Douglas Collection of Indian Antiquities, objects from the mounds and burial-places of the Central West States, and human remains and implements from the glacial gravels of Trenton, N. J. Here also is a *Japanese Room*, fitted up to illustrate the adaptation of Oriental material and patterns to Occidental uses. In the gallery of the W. Hall are the **Peruvian Antiquities* (gold and silver objects, a unique series of musical instruments, skulls and mummies, pottery, and implements of copper) and other objects from S. America. In the gallery of the Corner Hall is the *Chinese Collection*. — The Corner Hall is adjoined on the N. by a new hall, not yet open to the public. — The corridor at the head of the W. staircase is devoted to the fauna found near New York. — The Main Hall and its gallery contain the general collection of *Mammalia*. Among the skeletons is one of 'Jumbo', a huge African elephant brought by Barnum from England to America in 1882 (12 ft. high). In the middle hangs a skeleton of the Atlantic right whale. — In the corridor at the head of the E. staircase is a portrait of *Alex. von Humboldt*, by Julius Schrader. — The E. Hall is devoted to the *Land Mammals of N. America*, including some admirable specimens of mounting (buffaloes, moose, elks, walrus). From the ceiling hangs a model of the sulphur-bottom whale. In the Corner Hall are specimens of the polar bear, caribou, and musk-ox. In the gallery of this hall are the general *Collection of Insects* (railing-cases) and the *Hoffmann Collection of Butterflies*. Here also are mounted specimens of the zebra, rhinoceros, and a few other mammals. — From the middle of the Main Hall we enter the N. Hall, the floor of which is devoted

to the *General Collection of Birds*, while in the gallery are the habitat groups of the *Birds of North America*. Among the latter may be mentioned the brown pelican, flamingo, cormorant, wild turkey, egret, condor, fish-hawk, island birds (Bird Rock Group), and shore birds. Birds' nests and eggs are exhibited on the E. side of the floor of the N. Hall. Birds found near New York are at the W. end of the gallery of the Main Hall. — From the N.W. corner of the N. Hall a corridor, containing the collection of *Fish*, leads to the new W. Transept.

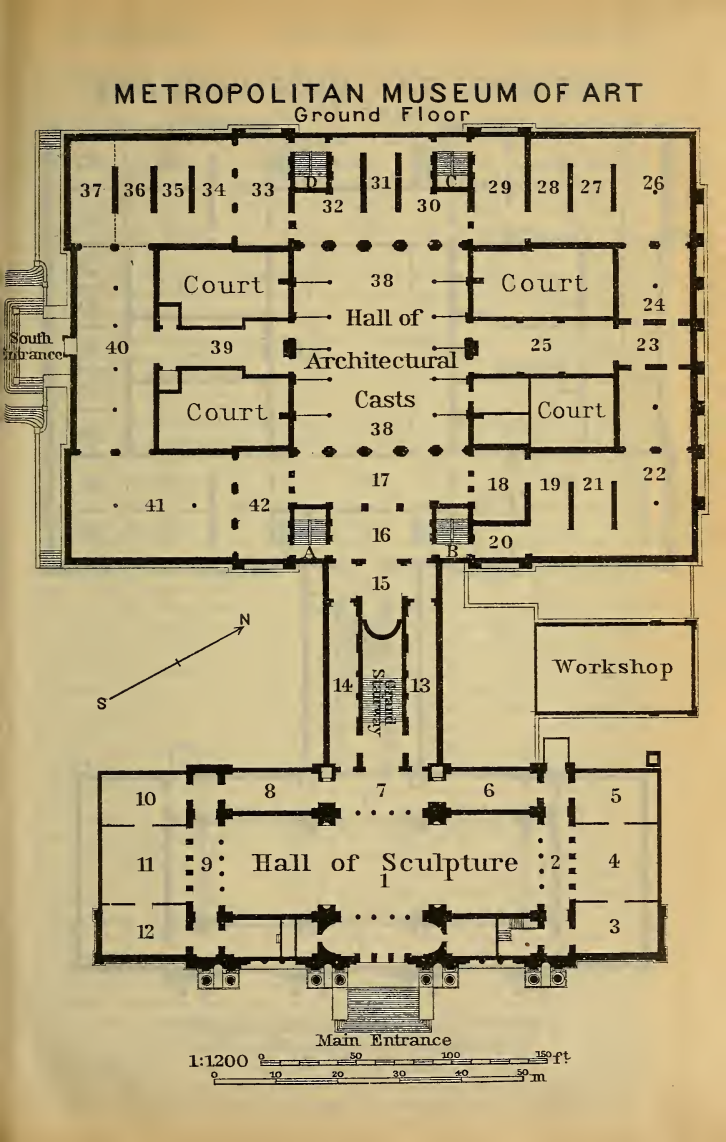
Second Floor. The E. Wing is devoted to the *Collections of Vertebrate Palaeontology*, including the valuable *Cope Collection of Fossils*. The alcoves of the first hall contain groups illustrating the extinct mammals which occupied N. America in the later geological periods. Among the most notable are those representing the evolution of the horse, the rhinoceros, the Titanotheres, the camel, the elephant, and the carnivora. The Phenacodus is one of the earliest known collateral ancestors of the hoofed mammals. One of the skeletons is that of the famous American racehorse 'Sysonby'. The second hall contains fossil reptiles and fish. In the corridor is the most complete known specimen of the Mosasaurus or marine lizard (30 ft. long). — The Central or Morgan Hall contains the **Bement Collection of Minerals*, presented to the Museum by Mr. J. Pierpont Morgan. — In the corridor beyond the Central Hall is the **Tiffany Collection of Gems*, also presented by Mr. Morgan. — The N. Hall contains the *Geological and Palaeontological Collections*, the principal feature of which is the **James Hall Collection*, illustrating the palæontology of New York and some of the W. States. It includes more than 100,000 specimens which have been used in the description of species by Hall (1836-98) and other geologists. — The W. or Loubat Hall contains casts of pre-Columbian sculptures from Mexico and Central America, and also pottery and objects of jade and gold, found in the explorations carried on with funds furnished by the Duc de Loubat.

Third Floor. This floor is mainly occupied by the *Library*, *Laboratories*, and *Offices*. The Central Hall, however, contains the *Collection of Shells*, the chief treasures of which are comprised in the Jay-Wolfe, D. Jackson Steward, Haines, and Crooke collections.

The Metropolitan Museum.

The Museum (adm., see p. 29) lies on the E. side of Central Park, opposite 82nd St., about 1/3 M. from the 84th St. Station of the Third Ave. Elev. Railway (p. 16). The Fifth Ave. omnibuses (p. 18) pass the door and the Madison Ave. street-cars (p. 18) within one block. The main entrance is in Fifth Ave., and there is another entrance in the S. façade within the Park.

The **Metropolitan Museum of Art* (Pl. K, L, 3) was originally an unpretending red brick building with granite facings, measuring 345 ft. in length by 235 ft. in breadth, erected in 1879-93; but in 1902 the present imposing façade of gray Indiana limestone, in the Renaissance style, designed by R. M. Hunt, was added. A new wing by McKim, Mead, & White has just (1908) been added on the N., and the complete design includes a S. wing and other extensions. The museum was incorporated in 1871 and has grown since then with marvellous rapidity. Among the chief features of the museum is the Cesnola Collection of Cypriote Antiquities (the largest in the world), found by Gen. di Cesnola (1832-1904) in 1865 et seq. The collection of Greek and Roman antiquities includes such unique objects as the Boscoreale frescoes (R. 10) and the Etruscan chariot (R. 12), while in R. 32 (upper floor) is one of the richest known collections


METROPOLITAN MUSEUM OF ART
Ground Floor
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Court
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Court
Hall of
Architectural
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South Entrance
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Main Entrance
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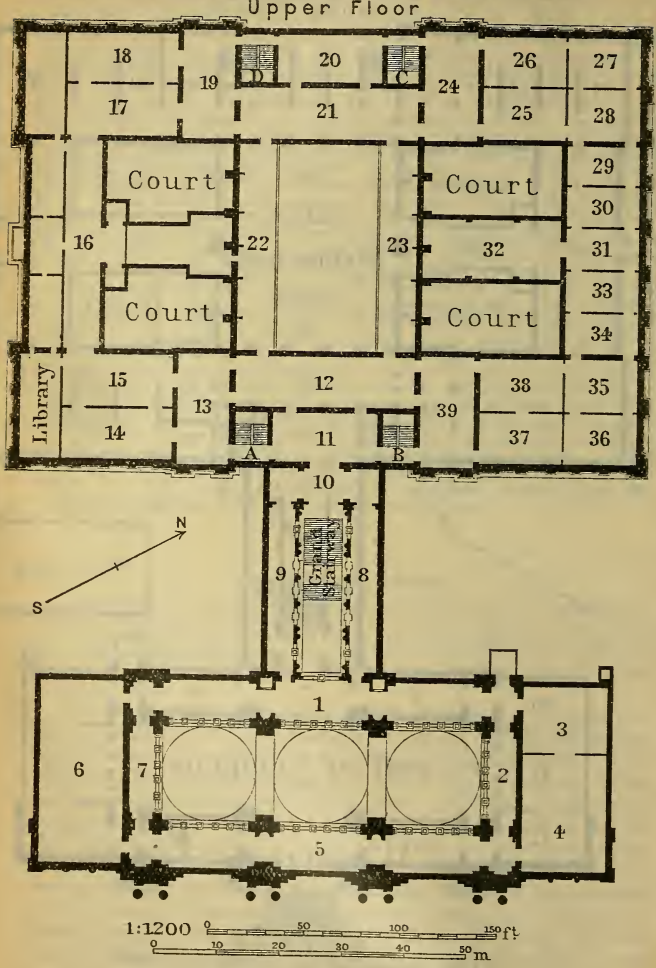
METROPOLITAN MUSEUM OF ART

Upper Floor



of ancient jewellery. The Morgan Collection of Chinese Porcelain (on loan), the Bishop Jade Collection, and the collections of armour and musical instruments are also of unusual excellence. Among the *Old Pictures* are good examples of Rembrandt, Van Dyck, Frans Hals, Rubens, Van der Meer, Sebastiano del Piombo, Piero di Cosimo, Giovanni di Paolo, Pollajuolo, Guardi, Lotto, El Greco, the Master of Flémalle, Goya, Holbein, and Van der Helst. The *Modern Paintings* are extremely valuable, the French (Meissonier, Detaille, Rosa Bonheur, Corot, Manet, Renoir, etc.), the German, and the British schools being all represented by good examples, while the American section is both large and representative. — Director, *Sir C. Purdon Clarke.* Catalogue of the paintings 25 c.; catalogues of special collections at varying prices. Most of the objects are labelled.

The museum received its charter from the State of New York, but the building itself and the ground on which it stands are loaned by the City of New York (comp. p. 56). The gifts of private donors, in money and in kind, have been of the most generous nature, and one-fourth of the cost of maintenance is borne by members of the corporation. In the basement are a restaurant (W. side; moderate prices), and lavatories for ladies (E. side) and gentlemen (W. side); there are other lavatories close to the main entrance (ladies, S. side; gentlemen, N. side). Canes, umbrellas, and parcels are checked at the stand to the right of the entrance (parcels, 5 c.; canes and umbrellas, free). The total number of visitors to the Museum in 1907 was 800,763.

Ground Floor. On entering by the principal door, we find ourselves in the fine HALL OF SCULPTURE (Pl. 1), 166 ft. long, 48 ft. wide, and two stories high, out of which a spacious staircase ascends to the upper floor. The modern statuary here includes examples of *Hiram Powers*, *Gibson*, *W. W. Story* (Salome), *Rinehart*, *Millet*, *Albano*, *Barnard* ('I feel two natures struggling within me'), *Palmer*, *Saint-Gaudens*, *Stewardson*, and other representatives of the American School. Interesting bronzes are a *Bacchante, by *MacMonnies*, a Bear Tamer, by *Paul Bartlett*, the *Brazen Age (Primitive Man), by *Rodin*, and the *Mares of Diomedes, by *Gutson Borglum*. The ancient sculptures include a marble figure of Eirene (Roman copy of a work by Cephisodotus) and a bronze statue of Emp. Trebonianus Gallus (251-253 A.D.). On the walls hang a large painting by *Makart* ('Diana's Hunting Party') and tapestry from the Coles collection. — The CORRIDOR to the right (Pl. 2) contains modern sculptures and the Giustiniani collection of Greek marbles. — ROOM 3 contains the most recent acquisitions, exhibited here until assigned their permanent position in the galleries. — ROOM 4, to the W. of Room 3, is devoted to woodwork and furniture in the Gothic, Renaissance, and 18th cent. styles. Among these are some doors from the Bibliothèque Royale at Paris, given to the Museum by Mr. J. P. Morgan, who has also presented the *Hoentschel Collection of 18th cent. Woodwork*, to be exhibited in the new N. wing (p. 58) adjoining this part of the Museum. — ROOM 5, adjoining, contains furniture (chiefly modern), Chinese embroidery and tapestry from the Coles collection, sedan-chairs, sleighs, and a chair said to have belonged to Rubens. — The small TRANSVERSE HALL (Pl. 6) is devoted to *Egyptian Antiquities*, found near the Pyramids of Lisht by the Museum's recent expedition. These include predynastic painted terracotta figurines; inscribed diorite offering-stand of King Khefrē of the 4th dynasty (ca. 2850-2700 B.C.), found near the ancient Bubastis; limestone sarcophagus of Princess Henhenet from Deir el-Bahri (11th dynasty); portrait of a King Mentuhotep of the same epoch; gold ornaments, ceremonial whip, etc., of Sembtes, an Egyptian lady of the 12th dynasty (ca. 2000-1780 B.C.), from tomb near Lisht; basalt sarcophagus of Hor-mehet-biti, from tomb near Sakkara (26-30th dynasties); sculptor's models of late-dynastic and Ptolemaic periods; silver vessels of the time of Ramses II.; original bronze *Crabs* placed under Cleopatra's Needle (p. 56). —

Passing through the short CORRIDOR OF MODERN BRONZE STATUARY (Pl. 7), including figures of John the Baptist by *Rodin* and Napoleon by *Laurit Thompson*, a bust of Goethe by *A. F. Fischer*, and a reduced replica of *Mercié's* 'Gloria Victis', we reach the corresponding Transverse Hall to the S. (Pl. 8). which contains *Greek and Roman Antiquities*, comprising figurines and terracottas from Tanagra and other Greek sites. — In the CORRIDOR to the S. (Pl. 9) are Greek marble statues (Giustiniani collection), modern marble statues, a *Memorial Monument to E. A. Poe* (1809-49), erected by the actors of New York, and a fine Italian marble *Mantel* of the 16th cent., richly carved, from the Marquand Collection. — ROOM 10, in the corner, contains some interesting **Frescoes* from the Pompeian villa at Boscoreale, overwhelmed in 79 A.D. by the eruption that buried Pompeii and Herculaneum and unearthed in 1900. One cubiculum, or bedroom, has been reconstructed so as to show the frescoes in their original positions; frescoes from the other rooms of the villa are shown in wooden frames. The colour of the frescoes, especially the vivid reds of the architectural panels, is their principal charm. This room also contains Greek and Roman marble sculpture, including an archaic statue of a woman (Greek; figure 6th cent. B.C., head later); fragmentary *Statue of a woman (Greek; probably 6th cent B.C.); *Torso of a boy; fragmentary grave-stele of a woman (these two of the Phidian school; 5th cent. B.C.); a charming marble *Relief of a Young Horseman (Greek; probably of 4th cent. B.C.); gravestone (Attic school; 4th cent. B.C.); head of Augustus (Roman; 1st cent. A.D.?); and portrait head of a man (Roman; 2nd cent. A.D.). — ROOM 11 contains Greek vases from ca. 1200 B.C. to ca. 300 B.C. — ROOM 12 ('Bronze Room') contains Greek, Etruscan, and Roman bronzes from the Mycenæan to the Græco-Roman period. In the middle is a bronze-plated Etruscan **Biga*, a triumphal chariot dating from the 6th cent. B.C., in remarkable preservation (wooden parts new). The panels are carved with mythological subjects in high relief, and the minor ornamentation is also noteworthy. A few smaller objects found in 1902 in the same tomb as the Biga (near Monteleone de Spoleto) are also exhibited here. Collection of fibulæ (mainly Etruscan); bronze mirrors and mirror-handles, with incised designs; statuette of a girl holding a lotos-bud (Greek; 6th cent. B.C.); statuette of a youth carrying a pig (Greek; 5th cent. B.C.); small Discus-thrower (pre-Phidian?); reliefs of Satyrs' heads (Greek; 3rd or 2nd cent. B.C.); statue of a Camillus or boy-acolyte (Roman; 1st cent. B.C.?); statuette of a panther (Roman; Early Empire); car of Cybele (Roman; 2nd cent. A.D.?).

The long GALLERY (Pl. 14) to the left of the staircase, leading from the Hall of Sculpture to the old building, contains *Antiquities*, chiefly from Gen. di Cesnola's Cypriote collection, including inscribed clay tablets and cylinders in Assyrian and Babylonian characters, and inscribed stone tablets and columns in Assyrian, Hittite, Phœnician, Greek, and Roman characters. At the E. end of the gallery is a fine marble **Sarcophagus* from Rome (prob. 1st or 2nd cent. A.D.) At the W. end is another *Sarcophagus*, partly in the Assyrian and partly in the Greek style, found at Amathus, a Phœnician city in Cyprus, and dating probably from the 6th cent. B.C. The *Sarcophagus* from Golgoi (ca. 600 B.C.) also illustrates the mingling of Assyrian and Greek art. In the centre is an elaborate white marble Græco-Phœnician *Sarcophagus*. — The small ROOM 15 contains scarabs, terracotta lamps (Roman period), statuettes and bronzes from Oxyrynchus, and other Egyptian antiquities. In the centre are standards with textile fabrics from the Fayûm (4th cent. B.C. to 11th cent. A.D.).

We now reach the old building and enter a series of rooms containing SCULPTURAL CASTS. ROOM 16. *Persian Casts.* — ROOM 17 contains ARCHITECTURAL CASTS & MODELS, including a model of the Hypostyle Hall of the Temple of Karnak and one of the Pulpit of Siena Cathedral by *Nic. Pisano* (1266-68; marking the fusion of Gothic and Romanesque ideas in Italy). Here, too, are some stone fragments from Trajan's Forum at Rome (111-114 A.D.). — We now turn to the right. ROOM 18. *Egyptian Casts.* — ROOM 19. *Chaldaean and Assyrian.* — ROOM 20. *Prehistoric Greek.* — ROOM 21. *Early Greek.* — ROOMS 22 & 23. *Greek* of 5th & 6th cent. B.C. — ROOM 24. *Friezes and Sculptures from the Parthenon*, and other Attic casts. — CORRIDOR 25 (con-

necting R. 23 with the Central Hall, see below). *Casts of Greek Sculptures* of the 4th cent. B.C.; *Reproductions of Bronzes from Herculaneum.* — Rooms 26-28. *Later Greek.* — Room 29. *Late Greek and Roman.* — Rooms 30 & 31. *Casts of French Gothic Sculptures;* four *Stone Gargoyles* (French Gothic). — Room 32. *French Renaissance.* — Rooms 33-36. *Italian Renaissance.* — Room 37. *German Renaissance.* — We now retrace our steps to R. 32 and enter the central Hall of Architectural Casts (Pl. 38), which is lighted from the roof. Among the chief objects reproduced here are a window from the Certosa (Pavia); the Pulpit of Santa Croce (Florence) by *Benedetto da Majano;* the Monument of Lysicrates; the façade of the Guild House of the Butchers, Hildesheim (1529); the Portico of the Erechtheum; the Parthenon (model), with full-size reproductions of parts of pediment and frieze (on walls); topographical model of the Acropolis; the Pantheon (interior accessible); Notre Dame; Shrine of St. Sebaldus at Nuremberg, by *Peter Vischer* (1519); and a bay of the cloisters of St. John Lateran (12th cent.). Here also are a few large sculptural casts. Above, skirting the galleries, are casts of the tympanum sculptures of the E. and W. pediments of the Temple of Zeus at Olympia, and of the frieze of the Temple of Apollo near Phigaleia. We now proceed through Corridor 39 (*Italian Renaissance Sculpture*, originals and casts of the Della Robbia school) to Room 40, which, with Rooms 41 & 42, contains the *Cesnola Cypriote Collection*, including heads and other fragments of statues, statuettes (many with traces of colouring), statues (amongst others, an archaic Hercules), terracottas, sepulchral steles, alabaster vases, inscribed lamps, etc. All forms of ancient art, from Assyrian to Græco-Roman, are represented in the sculptures. In a wall-case are some interesting representations of Venus, from the earliest rude approximations to the human form to works of the best Greek period. Part of the collection of *Ancient Glass* is temporarily exhibited here.

We now again pass through RR. 17, 16, & 15 and so reach Corridor 13, containing Egyptian Antiquities (mummies and mummy-cases; so-called canopi, or jars for the entrails of the deceased; funerary tablets; stone, bronze, and terracotta images; jewellery; toilet accessories; coiffure-support in leather; flint knives and other implements). This corridor brings us back to the new wing.

We have now finished our tour of the groundfloor, and next ascend the Grand Stairway, ornamented with marble busts, to the upper floor. The small Room 10, at the head of the staircase, contains a bust of Pope Innocent X by *Algardi*, a bronze statue of Washington by *Houdon*, some reproductions of metal work, a modern French stained-glass window, designed by L. O. Merson, and the lacquered doors from the Palace of Ispahan.

Upper Floor. The Corridor to the N. (Pl. 8) contains a fine collection of *Japanese Armour*, including prehistoric bronze corselet, helmets, and ceremonial spear, part of the votive harness of Hachiman Taro from Utatsu, and a decorated *Corselet and *Helmet of 1200 A.D. This corridor leads to Corridor 1, in the gallery of the Hall of Sculpture, containing chiefly *Japanese Objects of Art*, including bronzes, cloisonné enamel, woodwork, a model of a pagoda at Todaiji Nara (in bronze and other metals), and the *Bryant Vase*, by Tiffany, presented to the poet on his 80th birthday (1874). Here also is some *Oriental and European Armour*. Turning to the left, we reach Corridor 2, containing *European Pottery and Porcelain*. At the farther end is a relief of the Assumption, by *Luca della Robbia* (1400-1482), an original from the mortuary chapel of the Princes of Piombino. — Room 3 contains *European Arms and Armour*, including the *Collection formerly belonging to the Duc de Dino and the J. H. Ellis Collection, with additions (catalogue, by Bashford Dean, 25 c.). The historic pieces include a harness of Philip II., casque and horse-frontal of Henry II., half-suit of the Duke of Sessa, arquebus designed for Louis XIII., casque and shield of Louis XIV., tournament helm of Sir Giles Capel, the crossbow of Ulrich V. of Wurtemberg, and the probably authentic *Casque of Joan of Arc. — Room 4 is devoted to the **Heber R. Bishop Collection of Jades* (catalogue 10 c.). The room is fitted up so to reproduce the ball-room of Mr. Bishop's house (modelled after a room in the Palace of Versailles) and contains a portrait of him by Bonnat. — Corridor 5 contains the collection

of *Oriental and European Porcelain and Majolica*, presented by Mr. Henry G. Marquand and others; part of a *Dado from the Pavilion of Chechel Sutoon at Ispahan, built in the reign of Shah Abbas I. (1587-1628), and two large blue *Sèvres Vaess*, presented by the Republic of France to American Societies. — At the corner where we turn into Corridor 7 is an ancient *Buddhist Shrine*. The corridor contains *Chinese & Japanese Lacquers and Bronzes*, with a lacquer *Shrine* (modern Japanese) at the farther end. — Room 6 contains a superb collection of **Old Chinese Porcelain*, loaned by Mr. J. Pierpont Morgan (originally formed by Dr. Garland, but much extended; catalogues 25 c. and $ 3). Case I contains the only known specimen of a *Red Hawthorn Beaker (No. 14). — Corridor 9, leading back to the old building, contains *Silver Ware*. In the centre cases, European and American silver; in the wall-cases, reproductions of pieces in European collections. Above is European *Stained Glass* (15-17th cent.).

Other Staircases ascend to the Upper Floor from both ends of Halls 16 and 31. On the walls of Stairway A (S.E.) are the Seasons by *J. J. Horemans* and other old paintings. Stairway B (N.E.) has a hunting-scene by *Horemans* and other works. On Stairway C (N.W.) are works by *Dirck* and *Frans Hals*, *Pieter Brueghel*, and *Nic. Poussin*. Stairway D (S.W.) is hung with the Muses by *Fagnani* (portraits of New York ladies), paintings by *Maréchal*, *Haydon*, and *Karl Müller*, and a piece of Spanish tapestry.

We begin our tour of the upper floor of the old building, containing the collection of paintings, with Room 11, opening from the Grand Stairway.

Room 11 (*Primitive Masters of Various Schools*). We begin at the S. end of the W. wall (opposite the main entrance): *Giovanni di Paolo* (ca. 1400-1481), no number, Paradise, and part of an altar-piece; 22. *Pollajuolo* (1429-98), St. Christopher and the Infant Christ; no number, *Fiorenzo di Lorenzo* (ca. 1472-1520), Nativity; no number, *Cornelis Engelbrecht* (1468-1533), Crucifixion; 262. *J. van Eyck* (ca. 1380-1440), Virgin and Child; no number, *Jacques Daret* (Maître de Flémalle; ca. 1410-65), Virgin and Child; 85A. *Isenbrandt* (ca. 1490-1551), Ecce Homo and Mater Dolorosa; ascribed to *Luis Borrassa* (Span.; early 15th cent.), Large altar-piece; *Carlo Crivelli* (1468?-95), no number, St. George in Armour, St. Dominic; no number, *Cima da Conegliano* (1459-1517?), Altar-piece (SS. Roch, Anthony, and Lucy); *Piero di Cosimo*, 93. Returning from the Chase, 92. Hunting-scene. — This room also contains some primitive sculpture, including a Madonna and Child (painted terracotta relief) by *Jacopo della Quercia* (1374-1438); a Gothic Muranese Tabernacle, enclosing a Madonna in painted and gilded wood; a Madonna and Child (marble relief; loan), by *Agostino di Duccio* (1418-ca. 1481); and a Head of a boy (glazed terracotta; loan), by *Rossellino* (1409-64).

Room 12, to the W. of R. 11, contains *Modern Paintings of the American School*. We begin to the left of the N. door on the E. side: 131. *W. M. Chase* (b. 1849), Portrait; 656. *W. J. Dannat* (b. 1853), Quartette; no number, *Winslow Homer* (b. 1836), Gulf Stream; 541. *George Fuller* (1822-84), 'And she was a witch'; 174. *Gilbert Stuart* (1755-1828), Capt. Henry Rice; 110. *Elihu Vedder* (b. 1836), Sentinel; 171. *John Trumbull* (1756-1843), Alex. Hamilton; 101. *Joseph Kyle* (1813-63), Portrait; *George Inness* (1825-94), 150. Autumn oaks, 120. Pine Grove (Italy); 125. *Thomas Cole* (1801-48), Valley of the Vaucluse; 124. *John F. Weir* (b. 1841), Forging the shaft; 130. *Picknell* (1825-97), Bleak December; 133. *Henry Mosler* (b. 1841), Wedding feast in Brittany; 197. *Cole*, In the Catskills; 148. *Eastman Johnson* (1824-1906), Two men; no number, *Whistler* (1834-1903), *Nocturne; *225 b. *John S. Sargent* (b. 1856). W. M. Chase: 603. *J. W. Alexander* (b. 1856), Walt Whitman.

Gallery 23, which we enter from the N.W. door in R. 12, contains *Medals and Plaques* by David d'Angers, Roty, Charpentier, and other masters; **European and Oriental Knives* (17-18th cent.); **Renaissance Door Fittings; Bronze and Iron Gates; German Strong Box* (16th cent.); and *Modern Bronzes*. On the walls: no number, *Loeb*, Temple of the winds; 679. *Boutigny*, Revolt at Pavia; 582. *Julien Dupré* (b. 1851), The balloon; *558. *F. A. Bonheur* (1824-84), Woodland and cattle (fine sunlight effect). This gallery overlooks the Architectural Court (p. 61). — Gallery 22 (entered from the S.W. door of Room 12) contains portraits and memorials of *Washington*, *Franklin*, and *Lafayette* (including earliest known portrait of

Washington, a miniature), Thusnelda at the triumph of Germanicus (No. 598), by *C. T. von Piloty* (1826-86), *Japanese Textile Fabrics*, and small *Modern Bronzes*. On the walls, Roman tapestry designed by *F. Romanelli* (1635).

Room 13, reached direct from Staircase A or from the S. end of R. 12, contains *Paintings*, mainly of the earlier American School. We begin to the left of the entrance from Staircase A: *Gilbert Stuart*, 164. John Jay, no number, *Doña de Jaudenes, *199. George Washington, no number, Gibbs-Channing-Avery portrait of Washington, 225c. Judge Anthony, no number, *Don Josef de Jaudenes y Nebot, first Spanish Minister to the United States; good landscapes by *Bunce*, *Daingerfield*, *Homer*, and *Church*; no number, *Brush* (b. 1855), In the garden; no number, *A. H. Thayer* (b. 1849), *Daughter of the artist; 206. *Matt. Pratt* (1734-1805), The American School, with portraits of Ben. West, Pratt himself, and other painters; 176. *C. W. Peale* (1741-1827), Washington; Portrait by *Sully*. — The S.E. door leads into —

Room 14, containing a **Collection of Old Masters*, chiefly of the Dutch and Flemish Schools. To the left: *Rubens* (1577-1640), *33. Cambyses' punishment of an unjust judge, *226. Susannah and the Elders (Susannah a portrait of his second wife, Helena Fourment; painted after 1630); 1. *A. de Vries* (17th cent.), Portrait; *232. *School of Van Dyck* (1599-1641), Lady with a ruff; 76. *Jan Steen* (1626-79), Dutch kermesse; 77. *Teniers the Younger* (1610-90), Marriage-festival; 30. *B. van der Helst* (1613-70), Guitar-player; 59. *A. van Ostade* (1610-85), Fiddler; 235. *Jacob van Ruysdael* (1628-82), Landscape; 236. *B. van der Helst*, Portrait; *Rembrandt* (1606-69), 237. The mills, 241. Adoration of the Shepherds; 271. *Jurriaen Ovens* (1623-78), Portrait (dated 1650); 75. *Teniers the Younger*, Temptation of St. Anthony; 8. *A. van der Neer* (1603-77), Sunset; *58. *Frans Hals* (ca. 1580-1666), Hille Bobbe of Haarlem, the sailors' Venus; 7. *Teniers the Elder* (1582-1649), Dutch kitchen; no number, *M. J. van Mierevelt* (1567-1641), Portrait; 81. *Caspar Netscher* (1639-84), Dutch lady; 54. *B. van der Helst*, Dutch Burgomaster; 242. *Hendrik M. Sorgh* (1611-70), Kitchen; 238. *Netscher*, Card party; 228. *S. van Hoogstraten* (1626-78), Portraits of a gentleman and lady; *260. *Aelbert Cuyp* (1620-91), Landscape with cattle; 273. *Metsu* (1630-67), Music-lesson; *264. *Frans Hals*, Portrait; *266. *John S. Sargent*, Henry G. Marquand (see p. 62), President of the Museum in 1890-92, who presented many of the finest works in this gallery and in R. 20; 248. *Van Dyck*, Portrait; *270. *Velazquez* (1599-1660), Portrait of himself(?); *234. *Frans Hals* (school-piece?), The smoker; 276. *G. Terburg* (1617-81), Portrait; 11. *Jan Steen*. The old rat comes to the trap at last; 71. *Rachel Ruysch* (1664-1750), Flowers and fruit. — We now pass into —

Room 15, containing *Pictures from the Collection of Mr. G. A. Hearn*, chiefly by British and American masters. The numbering begins to the E. of the N. door: 280. *Inness*, Peace and plenty; 281. *Gainsborough* (1727-88), Portrait; 282. *R. P. Bonington* (1801-28), Scene in Normandy; 284. *Richard Wilson* (1715-82), Storm; 287. *Sir Joshua Reynolds* (1723-92), Portrait; 290. *John Hoppner* (1758-1810), Portrait; no number, *Hogarth* (1697-1764), Peg Woffington; 291. *Sir Peter Lely* (1617-80), Portrait; 293. *Sir Godfrey Kneller* (1646-1723), Portrait; 294. *Sir Henry Raeburn* (1756-1823), Portrait; 295. *Reynolds*, Duke of Cumberland; 296. *George Morland* (1763-1804), Midday meal; 299. *Claude Lorrain* (1600-1682), Seaport; 301. *J. van Ostade* (1621-49), Winter-scene; 302. *P. de Hooch* (1630-ca. 1677), Dutch interior; 303. *A. Willaerts* (1577-1664), River-scene; 307. *A. Cuyp*, Landscape with cattle; 308. *Reynolds*, Portrait; no number, *Romney* (1734-1802), Lady Hamilton; 315 *Wilson*. Landscape; *Reynolds*, no number, Child, 318. Mrs. Angelo; 319. *Jacques Blanchard* (1600-1638), Venus and Adonis; 322. *Sir Thos. Lawrence* (1769-1830), Lady Ellenborough; 323. *Gainsborough*, Landscape; 325. *Daniel Mytens* (17th cent.), Charles I.

Room 16 at present contains the valuable **William H. Vanderbilt. Collection of Modern Paintings*, lent by Mr. George W. Vanderbilt. This includes admirable examples of *Meissonier*, *Millet* (77. Water Carrier, 79. Sower), *Corot*, *Gérôme*, *Detaille*, *Troyon*, *Breton*, *Rousseau*, *Diaz*, *Rosa Bonheur*, *Linnell*, *Alma-Tadema*, and many other French and British Masters.

Room 17 contains a collection of modern paintings bequeathed to the Museum by *Miss Catharine Lorillard-Wolfe* (1828-87), along with an endowment of $ 200,000. To the left: 336. *Hoppner*, Mrs. Bache; 338. *Bida* (1813-95), Massacre of the Mamelukes in 1811; 337. *Rousseau* (1812-67), Edge of the woods;

340. *Lord Frederick Leighton* (1830-96), Lachrymæ; 334. *Falero* (1851-96), Twin stars; *350. *E. Meissonier* (1815-91). Sign-painter; 349. *Doré* (1832-83), Retreat from Moscow; 344. *M. Leloir* (b. 1853), Opportunity makes the thief; *353. *Meissonier*, Adriaen and Willem Van de Velde; 354. *Gérôme* (1824-1904), Arab boy; 358. *Jules Breton* (1827-1906), Peasant girl knitting; 359. *Couture* (1815-79), Idle student; 360. *A. Achenbach* (b. 1815), Sunset; *364. *Jules Breton*, Religious procession in Brittany; 365. *Marchal* (1825-77), Evening in Alsace; 373. *Louis Haghe* (1806-85), A toast in the guard-room; 374. *Meissonier*, General and adjutant; 375. *Narcisse Diaz de la Peña* (1807-76), Holy Family; 380. *Vibert* (1840-1902), The startled confessor; *382. *F. E. Delacroix* (1798-1863), Abduction of Rebecca ('Ivanhoe'); 389. *E. Detaille* (b. 1848), Skirmish between Cossacks and the Old Guard; *394. *Gabriel Max* (b. 1840), The last token; 390. *J. J. Henner* (1829-1905), Bather; 397. *Isabey* (1804-86), Banquet-hall; 396. *Schenck* (1828-1901), Lost (a scene in Auvergne); 399. *Cabanel* (1823-89), The Shulamite Woman (Song of Solomon, 8).

Room 18 (*Wolfe Collection* continued). To the left (of S. door): 414. *Fortuny* (1838-74), Camels at Tangiers; 415. *Boldini* (b. 1845), Gossip; 418. *Daniel Huntington* (b. 1816), John David Wolfe, father of Miss C. L. Wolfe; 421. *Cabanel*, Portrait of Miss Wolfe; 474. *Boughton* (1833-1905), Puritan girl; 426. *Rosa Bonheur* (1822-99), Hound; 428. *Detaille*. Cuirassier; 432. *Dupré* (1812-89). Hay-wagon; 433. *Decamps* (1803-60), Night patrol at Smyrna; 435. *Van Marcke* (1827-91), The mill; 437. *Bonnat* (b. 1833), Fellah woman and child; 440. *Munkacsy* (1846-1900), Pawnbroker's shop; 441. *Vibert*, A reprimand; 442. *Bargue* (d. 1883), Bashi Bazouk; 443. *Berne Bellecour* (b. 1838), The intended; *444. *Troyon* (1810-65), Dutch cattle; 447. *Merle* (1823-81), Falling leaves; 449. *Rosa Bonheur*, Weaning the calves; 450 *W. von Kaulbach* (1805-74), Crusaders before Jerusalem (a large allegorical work); 451. *Lefebvre* (b. 1836), Girl of Capri; *455. *Troyon*, White cow; 458. *Lambert* (1825-1900), Cat and kittens; 459. *Desgoffe* (1830-1901), Still-life (original objects in the Louvre and selected by Miss Wolfe for the artist); 468. *Schreyer* (1828-99), Arabs on the march; 469. *Leroux* (1829-1900), Roman ladies at the tomb of their ancestors; *472 *Gérôme*, Prayer in a Cairene mosque; 476. *Cot* (1837-83), The storm; 480. *Pasini* (1826-99), Entrance to a mosque; 482. *Rousseau*, River-scene; 483. *Corot* (1796-1875), Ville d'Avray.

Room 19 (*Paintings of Various Schools*). We begin to the left of the door from R. 18: 277. *Zurbaran* (1598-1662), St Michael the Archangel; 109. *Franc. Goya* (1746-1848), 'Caprichos'; no number, *Giordano* (1632-1705), Presentation in the Temple; *46. *Van Dyck*, St. Martha interceding for the cessation of the plague at Tarascon; 493. *François Boucher* (1703-70). Rescue of Arion from the waves; *501. *Nicolas Largillière* (1656-1746), Portrait; *503. *F. H. Drouais* (1727-75), Joseph II. of Austria; *504. *Jean Marc Nattier* (1685-1766), Princesse de Condé as Diana; no number, *Lhermitte* (b 1844), Among the lowly; no number, *Antoine Vernet* (1758-1836), Roman triumph (a large canvas); 519. *Duplessis* (1725-1802), Benjamin Franklin; 508. *Greuze* (1725-1805), Study of a head; no number, *Murillo* (1617-82), St. John the Evangelist; *J. B. Tiepolo* (1696-1770), 96. Triumph of Ferdinand III., 105. Sacrifice of Abraham, 88. Crown of Thorns; *Francesco Guardi* (1712-93), 89. The Rialto, 5. Santa Maria della Salute; no number, *Tintoretto* (1518-94), Last Supper; 108. *Goya*, Jewess; 90. *Carlo Maratta* (1625-1713), Clement IX.

Room 21 (*Various Modern Schools*). The numbering begins to the left of the S.W. door leading into R. 20: No. 583. *Carl Marr* (b. 1858), Gossip; *Josef Israels* (b. 1824), 539. Bashful suitor, 637 Expectation; *Anton Mauve* (1838-88), 543 Autumn, 588. Spring; 544. *Cabanel*, Birth of Venus; *Adolphe Monticelli* (1828-86), no number, La cour de la Princesse, Dames de qualité; 651. *Edouard Manet* (1832-83), Girl with a parrot; *Gustave Courbet* (1819-77), 536. Coast scene, no number, Effet de neige; no number, *Auguste Renoir* (b. 1841), *Mme. Charpentier and her children; no number, *Puvis de Chavannes* (1824-98), The shepherd's lay; 566. *J. J. Henner*, Mary Magdalen; 565. *Lhermitte*, Vintage; *562. *E. Detaille*, Defence of Champigny. — *650. *Rosa Bonheur*, Horse-fair, the artist's masterpiece, familiar from Thomas Landseer's engraving. A quarter-size replica is in the London National Gallery. This, the original picture, was purchased by Mr. Cornelius Vanderbilt, on the dispersal of the Stewart collection, for $58,000 and given by him to the

Museum. — *538. *Meissonier*, Friedland, 1807 (one of the few large canvases of this painter, intended, in the master's own words, to represent 'Napoleon at the zenith of his glory, and the love and adoration of the soldiers for the great Captain for whom they were ready to die'). It was bought by Mr. Henry Hilton for $ 66,000 and presented by him to the Museum. — 545. *Maignan* (b. ca. 1835), 'L'Attentat d'Anagni', an incident in the life of Pope Boniface VIII.; 653. *Clays* (1819-99), Celebration of the freedom of the port of Antwerp (1863); 552. *Bisi* (1814-86), Milan Cathedral; *550. *Bastien-Lepage* (1848-1884), Joan of Arc.

Room 20 *(British School)*. To the left (of S.E. door): No number, *Millais*, Portia; 227. *Hogarth*, Miss Rich; 151. *Robert Walker* (d. 1658), Gen. Ireton; no number, *Romney*, Mrs. Fitzherbert; 252. *Constable* (1776-1837), Lock on the Stour; 99. *George H. Story* (b. 1835), Young mother; *244. *J. M. W. Turner* (1775-1851), Saltash; *166. *Reynolds*, Hon. Henry Fane and his guardians Inigo Jones and Charles Blair (a large and splendid group, recalling the so-called 'Three Graces' in the London National Gallery); *254. *Constable*, Valley Farm; *J. M. W. Turner*, *341. Whale-ship, *165. Grand Canal, Venice; 167. *Charles Lucy* (1814-73), Nelson in the cabin of the 'Victory'; 163. *Reynolds*, Portrait; no number, *G. F. Watts* (1818-1904), Ariadne; 41. *Berchem* (1620-83), Rest; 168. *Sir Martin Archer Shee* (1769-1850), Daniel O'Connell; 246. *Reynolds*, Lady Carew; *Gainsborough*, 243. Girl with a cat, no number, Portrait of himself, 278. Landscape; *251. *Old Crome* (1769-1821), Hautbois Common; no number, *Lely*, Nell Gwynne. On a screen, *D. G. Rossetti* (1828-1882), Lilith.

Room 24 *(Selected Paintings of Various Schools)*. We begin to the left of the entrance from R. 21: No. *269. *Frans Hals*, Portrait of an old lady (so-called artist's wife); 258. *J. van der Meer* (1632-75), Young woman opening a casement; no number, *C. Caliari* (1570-96), Allegorical figures; no number, *N. Maes* (1632-93), *Portrait; no number, *Van Dyck*, Neptune; *Holbein*, 231. Archbishop Cranmer, no number, Young man; *43. *J. Jordaens* (1593-1678), Philosophers; *Rembrandt*, 239, 240. Portraits; 230. *F. Torbido* (1486?-1546?), Portrait; no number, *F. Guardi*, Water-fête at Venice; 86. *Seb. del Piombo* (1485-1547), Christopher Columbus: no number, *Goya*, Don Sebastian Martinez; no number, *S. van Ruysdael* (1600-1670), Landscape; no number, Ascribed to *Giov. Bellini* (ca. 1430-1516), Madonna and Child; 39. *Van Goyen* (1596-1656). Windmill; 86. *Seb. del Piombo* (1485-1547), Christopher Columbus; 225. *Gilbert Stuart*, Mrs. Judge Anthony Jr.; *563. *Edouard Manet*, Boy with a sword; *49. *Rubens*, Holy Family; 101. *El Greco* (1548-1625), Nativity; no number, *L. Lotto* (1480-1556), Portrait; 253. *Van Dyck*, Duke of Richmond; *Cranach the Elder* (1472-1553), Elector of Saxony. — Over the doors of this room, forming decorative panels, are twelve portraits ascribed to *Bramantino* (d. 1535).

Room 25 *(Modern Paintings)*. We begin to the left of the entrance from R. 24: No. 537. *C. L. Elliott* (1812-68), Portrait of himself; 179. *D. M. Bunker* (1861-90), Portrait of the artist's wife; 669. *A. Maume*, Going to pasture; 676. *H. Mesdag* (b. 1831), The lone sea; 632. *Bonnat*, John Taylor Johnston, first president of the Museum (1870-90); no number, *G. Bierstadt* (1830-1902), Rocky Mountains; 549. *Homer Martin* (1836-97), White Mountains; 601. *A. H. Wyant* (1836-92), County Kerry; *Thomas Hovenden* (1840-95), Last moments of John Brown, 573. Jerusalem the Golden.

Room 26 contains the **Moore Collection*, including Oriental pottery and glass, metal-work, woodwork, basketry, lacquers, etc., especially of Moslem origin; Chinese and Japanese pottery, bronze, and lacquer; Greek and Roman glass and pottery. — Room 27 is devoted to *Chinese Porcelain*. — Room 28 contains the **Museum Collection of Glass* (15-20th cent.), including the Jarves collection of Arabian, Persian, Venetian, Spanish, and French glass, a collection of Tiffany's 'favrile' glass, and the Matthiessen collection of rock-crystal and jade. — Room 29. *Textiles*. Cases 1-18, European brocades and embroidery (14-18th cent.); Cases 19-24. Oriental embroidery. In the wall-panels, Burgundian tapestry (early 15th cent.). — Room 30. *Japanese Porcelain and Pottery*. — Room 31. *Japanese Pottery and Porcelain*.

Room 32. to the S. of R. 31. is the *Gallery of Gems, Coins Gold and Silver Ornaments, and Miniatures*. The **Cesnola Collection of Cypriote Ornaments* (mainly from Curium), contains beautiful specimens of gold

jewellery, fibulæ, rings, votive ornaments, engraved gems, silver vessels, etc. Some are of gold plated with silver. *King Collection of Engraved Gems* (catalogue 10 c.). *Egyptian, Babylonian, Phoenician, Greek, Roman, Etruscan,* and *Longobardic Gold Ornaments.* **Collection of Inscribed Cylinders* (Assyrian, Persian, Babylonian, Hittite, etc.). *Silver and Gold Ornaments* from Colombia and Peru. *Ward Collection of Greek Coins* (7th cent. B.C. to present day). *Durkee Collection of Roman Gold Coins* (46 B.C. to 326 A.D.). *Farman Collection of Greek, Roman, & Egyptian Coins. Moses Lazarus Collection of Miniatures and Snuff Boxes. Avery Collection of Spoons* (catalogue 20 c.). *Drexel, Phoenix,* and *Baxter Collections of Objects in Gold and Silver and Gems.* **Tabernacle Door* (11th cent.). *Limoges and Battersea Enamels.* **Decree of Emp. Gyelong of Annam,* conferring high rank on his grandmother. *Golden Book,* with Chinese characters. *Japanese Imperial Decorations.*

Room 33 is devoted to the *Collection of Lace,* presented by Mrs. J. J. Astor and others. — Room 34 contains *Fans and Textile Fabrics.* — Rooms 35-39 hold the *Crosby-Brown Collection of Musical Instruments.*

Near the N.W. corner of Central Park, beginning at 110th St. and extending thence to 123rd St., is the long and narrow *Morningside Park* (Pl. N, O, 2), with its long flights of steps and massive retaining walls. It affords good views of Central Park, Washington Heights, the Harlem River, and the high part of the Ninth Ave. El. Ry. (comp. p. 15). — On the W. this park is bounded by *Morningside Avenue West* and *Morningside Heights*, the site of several important new buildings. At the corner of Morningside Ave. W. and 112th St. is the new **Episcopal Cathedral of St. John the Divine** (Pl. N, 2), designed by *Heins* and *La Farge*, the corner-stone of which was laid in 1892, but the building of which has not progressed very far. The *Crypt*, including the curious Tiffany Chapel of mosaic glass (altar made of 150,000 separate bits of glass), and the *Belmont* or *St. Saviour's Chapel* are the only portions completed. One of the great arches of the crossing has also been erected, and the huge granite columns of the choir (over 50 ft. high) will soon be in place. On the walls of the crypt are hung two of the so-called 'Barberini Tapestries', eight of which, executed at Rome in the 17th cent., were bequeathed to the cathedral by Mrs. E. V. Coles. Services are held in the crypt on Sun. and on week-day afternoons (5 p.m.); it is open to the public on Tues., Thurs., & Sat., 4-6, but visits may be arranged for at other times also. A large model of the choir, 20 ft. long, may be seen in the cathedral grounds on application. — To the N. of this, in the block bounded by Morningside Ave. W., 10th Ave., 113th St., and 114th St., is the large building of **St. Luke's Hospital** (Pl. N, 2), constructed of white marble and white pressed brick, with a tower and clock over the main entrance. Adjacent is the *Sesrun* ('Nurses') *Club.*

To the N.W. of this point, on a magnificent site extending from 114th St. to 121st St., 110-150 ft. above the Hudson River, are the new buildings of ***Columbia University** (Pl. N, O, 1, 2), the oldest, largest, and most important educational institution in New York. It has over 500 professors and instructors and upwards of 5000 students

and ranks with the foremost universities of America. Among its alumni are Gouverneur Morris, John Jay, Alexander Hamilton, Hamilton Fish, and De Witt Clinton. The buildings are open on week-days from 9 to 6 (library till 11 p.m.). The grounds contain about 35 acres.

Columbia was founded by royal charter in 1754 as King's College, and the first college building was erected near the lower end of the island. In 1776 the college was suspended owing to its 'Tory' proclivities, but in 1784 it was re-incorporated as *Columbia College*. In 1787 it was transferred to an independent board of trustees. In 1857 the college was removed to 49th St., where it remained until its transference to the present site in 1897. In 1890 the institution was reorganized on a broad university basis, and it now consists of Columbia College proper (for men) and Barnard College (see below), affording liberal undergraduate courses, and of the Schools of Law, Medicine, Mines, Engineering, and Chemistry, Architecture, Music, and Design, Education (Teachers College, see below), Pharmacy, Political Science, Philosophy, and Pure Science. Significant features of its organization are the careful articulation of the work of the undergraduate colleges with that of the professional schools and the close relation which the University bears to the other institutions of the city. Thus the School of Design has been established on a coöperative agreement with the Academy of Design (p. 55).

The finest building, in the centre of the group, is the *Library (containing 400,000 volumes), a Roman structure surmounted by a flat dome, designed by *Chas. F. McKim* and erected by Mr. Seth Low, President of the University from 1890 to 1901, as a memorial to his father. The figure of 'Alma Mater' on the steps ascending to the library from the S. is by *Dan. C. French* (1903). To the N. is *University Hall* (unfinished), containing a gymnasium, a swimming tank, and the University Commons. The other buildings include *Schermerhorn Hall* (natural sciences), *Havemeyer Hall* (chemistry and architecture), *Fayerweather Hall* (physics and astronomy), the *Engineering* and *Mines Buildings*, *Hamilton Hall* (for Columbia College), *Earl Hall* (students' building; comp. p. 44), *Kent Hall* (for the Law School), and *Hartley* and *Livingston Dormitories* (600 rooms). **St. Paul's Chapel* (1906; by Howells & Stokes) contains stained-glass windows by *John La Farge* and others, commemorating graduates of the institution. On the Engineering Building is a tablet commemorating the battle of Harlem Heights (p. 69). — The medical school of Columbia is the **College of Physicians and Surgeons** (Pl. I, 1) in W. 59th St., between 9th and 10th Avenues (p. 55), which is handsomely endowed (by the Vanderbilt family) and thoroughly equipped. The *New York College of Pharmacy* (230 students), 115 W. 68th St., is similarly affiliated with the University. The total endowment of the University is $ 20,482,000, and the assessed valuation of its buildings and grounds $ 10,295,000.

The adjacent *Barnard College* (Pl. 1; O, 1), offering an undergraduate course for women (420 students), and *Teachers College* (Pl. 17, O 1; 830 students), a professional school of education, although independent corporations financially, are integral parts of the educational system of the University. Barnard College has four large buildings and Teachers College has seven.

***Riverside Drive** or **Park** (Pl. K-O, 1), skirting the hills fronting on the Hudson from 72nd St. to 127th St. (ca. 3 M.), affords beautiful views of the river and is one of the most striking roads that any city can boast of. It has become, perhaps, the most attractive residential quarter of New York, though a great architectural opportunity has been lost in the buildings that border it, these consisting largely of apartment-hotels, remarkable mainly for their size. The foundations of many of the buildings had to be hewn out of the solid rock. Between 73rd and 74th Sts. is the large **House of Mr. Schwab*, in the French château style of ca. 1500,

containing one of the finest organs in the country. Opposite 89th St., finely placed on the bluff overlooking the Hudson (*View), is the **Soldiers and Sailors Monument** (Pl. L, 1), designed by *C. W. Stoughton*, *A. A. Stoughton*, and *Paul E. Duboy*, and erected in 1902 'to commemorate the valour of the soldiers and sailors who in the Civil War fought in defence of the Union'. It is in the form of a small circular Greek temple, resembling the Choragic Monument of Lysicrates, with a peristyle of 12 Corinthian columns and a frieze of eagles. The material is white marble. A fine echo may be awakened inside the monument. In front of the monument is a copy of *Houdon's Statue of Washington* (p. 556). The striking brick house, with white marble facings, on the opposite side of the way is that of *Mr. I. L. Rice*. At 99th St. is the *Furniss House*, an old Colonial mansion. Adjacent is the *Church of St. Michael*, with beautiful chancel decorations by Tiffany. At 106th St. is a statue of *General Franz Sigel* (1824-1902), by Karl Bitter.

Near the N. end of the drive, on Claremont Heights (W. 122nd St.), is the **Tomb of General Ulysses S. Grant** (Pl. O, 1; 1822-85), a huge and solid mausoleum of white granite, erected in 1891-97 at a cost of $ 600,000 (120,000*l.*), from a design by *J. H. Duncan*. The monument consists of a lower story in the Doric style, 90 ft. square, surmounted by a cupola borne by Ionic columns. The total height is 150 ft. (fine view from the cupola). Adm., see p. 28.

The arrangement of the interior is analogous to that of Napoleon's tomb at the Hôtel des Invalides, and the general effect is much more impressive than the exterior. The red porphyry sarcophagus containing the body of Gen. Grant (1822-85) is placed in an open crypt below the centre of the dome; by its side is a similar sarcophagus containing the remains of his wife. The pendentives of the dome are adorned with alto-reliefs emblematic of the life of Gen. Grant, by *J. Massey Rhind*. Two small adjoining rooms contain flags of regiments engaged in the Civil War.

Near Grant's tomb is a *Gingko Tree* (*Salisburia adiantifolia*), planted in his memory by Yang-Yu, representing Li-Hung Chang (tablets in English and Chinese). The '*Tomb of the Amiable Child*' (d. 1797), enclosed by a railing on the edge of Riverside Drive, generally attracts attention.

Park Carriages ply along Riverside Drive from W. 72nd St. to the Grant Monument and back for a fare of 25 c. (stop-over tickets, available for any later carriage, issued without extra charge). — The S. end of the Drive may be reached by the Columbus Ave. surface cars or by the Sixth Ave. 'El' to 72nd St. (1/2 M.). The N. end of the Drive may be reached by the cars on 125th St. The 'Seeing New York' automobiles (p. 19) visit Riverside Drive and Grant's Tomb. Comp. also p. 55.

Visitors to Grant's Tomb may obtain luncheon at the *Claremont Hotel* (Pl. O, 1), at the extreme end of Riverside Drive.

To the N. of Riverside Park lies the district of *Manhattanville*, containing many old residences and the *Convent of the Sacred Heart* (Pl. P, 2), with its fine grounds. A fine viaduct crossing the Manhattanville valley leads to a prolongation of the Riverside Drive on the heights to the N. The *Sheltering Arms*, at the corner of Amsterdam Ave. and 129th St., is a refuge for destitute children. On a commanding site bounded by 138th St., Amsterdam Ave., 140th St., and St. Nicholas Terrace are the imposing new buildings

of the ***College of the City of New York** (Pl. P, 2; comp. p. 53), erected in 1903-8 by *Mr. George B. Post*, in the low-arch Gothic style, at a cost of nearly $5,000,000, and notable for their uniformity of design and symmetry of grouping.

The main building, with its square tower, contains a finely proportioned hall (175 ft. by 90 ft.), with a large mural painting ('Graduation') by *E. H. Blashfield*. The chemical laboratories are especially noteworthy for the completeness of their equipment. The great bell in the tower weighs 3½ tons. The College is maintained by the City of New York, and tuition is free to its 4000 students. — Close by is the Grange (see below).

In 143rd St., between Amsterdam Ave. and West End Ave., is the *Coloured Orphan Asylum*. Between 153rd and 155th Sts., adjoining the river, is *Trinity Church Cemetery* (Pl. Q, 1, 2), in two sections united by a bridge over the Boulevard. This was the scene of the hardest fighting in the battle of Harlem Heights (Sept. 16th, 1776). — In 156th St., Audubon Park, near Broadway (157th St. Stat. of Subway), is the ***Hispanic Society's Museum** (Pl. Q, 1; adm., see p. 29), a tasteful edifice by *Chas. Huntington*, containing Spanish paintings (Goya, Morales, Murillo, Velazquez, El Greco, Valdes Leal, etc.), Hispano-Mauresque lustre ware, ecclesiastical vestments, the original sketches for Viardot's illustrations to 'Don Quixote', coins, and a library of 30,000 vols. on Spanish and Portuguese subjects. The museum was built and endowed by *Mr. Archer Huntington*, to whose generosity the contents are also due. — Adjacent is the building of the *American Numismatic Society*, by the same architect.

The picturesque district of ***Washington Heights**, extending from about this point to Spuyten Duyvil Creek and from the Hudson to the Harlem, repays a visit and affords fine views of the Hudson and the Palisades (p. 83).

This district, which is now a favourite residence quarter, was the ground of desperate conflicts during the Revolutionary period. In Fort Washington Avenue, between 182nd and 186th Sts., is a monumental tablet marking the site of *Fort Washington* (on the highest point of the island, 260 ft. above the river), which was heroically but unsuccessfully defended against the British in Nov., 1776, after the battle of Harlem Heights. Before and during the latter battle Washington had his headquarters at the old *Jumel House* (161st St., overlooking the Harlem), then the home of Col. Roger Morris and his wife (Washington's old love, Mary Phillipse). The house was afterwards bought by Mme. Jumel, with whom Aaron Burr lived here 'during the days of his octogenarian love', and is now preserved as a museum, while the ground around it is a public park. The *Grange*, the home of *Alex. Hamilton*, lies at the corner of Tenth Ave. and 141st St. Near the house are the relics of the 13 trees planted by Hamilton to symbolize the 13 Original States. The house originally occupied by *Audubon*, the naturalist, is on the river, at the foot of 155th St.

At the corner of Eleventh Ave. and 163rd St. is the *Institution for the Instruction of the Deaf and Dumb* (500 pupils), at 176th St. is the *Juvenile Asylum*, and at Amsterdam (Tenth) Ave. and 191st St. is the *Isabella Home*, for the aged. The rocky bluff on which the latter stands is known as *Fort George*, from a redoubt built here during the Revolution, and has become a pleasure park (*Fort George Hotel & Café*, with fine view, open in summer only). The drive known as the *Speedway*, skirting the river (comp. p. 23), is continued by the *Lafayette Boulevard*, under Fort Washington. The scene here on any fine afternoon is well worth a visit.

***High Bridge**, crossing the Harlem River at 175th St., was constructed to carry the Croton Aqueduct (see below) across the Harlem; it is 1460 ft. long and consists of 13 arches, the highest of which is 116 ft. The water is carried across in iron pipes protected by brick-work, and above is the bridge-way, for walkers only (*View). There is a restaurant at the E. end of the bridge. A good view is also obtained from the embankment of the Reservoir, at the end of the bridge, or the adjoining Water Tower. A little farther up, at 181st St., is the ***Washington Bridge**, constructed in 1886-90 at a cost of nearly $ 2,700,000 (540,000*l.*). It is of steel, except the stone abutments and small parts of iron, and has a total length of 2400 ft., with two central arches, each of 510 ft. span. The lower centre of the arches is 135 ft. above the river.

A convenient way to visit these two bridges is to take the Sixth Ave. El. Ry. to 155th St. and go thence by the Putnam Division of the N. Y. C. & H. R. R. R. (without descending to the street; fare 5c.) to the foot of High Bridge. We then cross the bridge and walk along the W. bank of the Harlem to Washington Bridge, whence we return by the Subway (181st St.).

The *Central* or *McComb's Dam Bridge* (Pl. Q, 3) and the *Viaduct* connecting it with the top of Washington Heights (155th St.) are other important engineering works. The new *Henry Hudson Memorial Bridge* at Spuyten Duyvil is to be of reinforced concrete, with an arch 710 ft. in span.

The Water Supply for the Boroughs of Manhattan and the Bronx is obtained mainly from the watershed of the *Croton River* (p. 87). The *Old Croton Aqueduct*, which crosses the High Bridge (see above), was completed in 1842 and has a capacity of about 85 million gallons a day. The **New Croton Aqueduct*, constructed in 1883-90, at a cost of about $ 20,000,000 (4,000,000*l.*) and at an average depth of 150 ft. below the surface, is carried under the Harlem River in a tunnel about 300 ft. below the river-bed, and has an estimated daily capacity of about 295 million gallons. Both aqueducts discharge their waters into the Jerome Park Reservoir (p. 71) and into Central Park Reservoir (p. 55; capacity 1,000,000,000 gallons). The iron mains distributing this water have an aggregate length of 1100 M. The *New Croton Dam*, 1 M. to the E. of *Quaker Bridge*, is 216 ft. long, 297 ft. high, and 206 ft. wide at the base. — For the new system of waterworks now in construction (Ashokan Reservoir, etc.), see p. 101.

A *Ship Canal*, constructed to improve the navigation of the Harlem River (which is simply a tidal channel), affords access from Long Island Sound to the Hudson River for vessels of small draught.

The **Borough of the Bronx**, or that part of New York to the N. and E. of the Harlem, takes its name from the small river *Bronx*, and includes *Morrisania* (perpetuating the name of Gouverneur Morris), *West Farms*, *Fordham*, *Mott Haven*, *Williamsbridge* (a favourite Sun. resort of French residents), and several other villages now incorporated with the city. The Bronx is traversed by several lines of tramways, by the Elevated Railroad (p. 16), by the Subway (p. 17), and by the New York Central and New Haven & Hartford railroads (p. 10).

Among the large new park-spaces here are *Van Cortlandt Park* (1130 acres), *Bronx Park* (660 acres), *Crotona Park* (155 acres), and *Pelham Bay Park* (1755 acres), adjoining Long Island Sound, 4 M. to the E. of Bronx Park and 15 M. from the City Hall. All these are connected by boulevards. — In Van Cortlandt Park is the **Van Cortlandt Mansion*, built in 1748 and now fitted up as a Museum

of Colonial and Revolutionary Relics (open daily, 10-6, in winter 10-5; Sun., 2-6; adm. 25 c. on Thurs., free on other days). — The S. part of Bronx Park is occupied by the grounds of the ***New York Zoological Society** (adm., see p. 29), with an area of 260 acres (London Zoological Garden, 36 acres).

The primary object of this society is to secure *herds* of large N. American quadrupeds and to place them as far as possible in surroundings resembling their natural haunts. Thus the bisons have a range of 15 acres, the wapiti 15 acres, the deer 8 acres. Among other novel features is the effort to make the animals accessible to artists and students, and several studios have been provided in the larger buildings. Among the important points are the *Reptile House*, the *Lion House*, the *Monkey House* (well ventilated), the *Antelope House*, the *Bear Dens*, and the so-called *Flying Cage* (aquatic birds; 152 ft. long, 72 ft. wide, and 55 ft. high). In the *Administration Building* is a fine collection of heads and horns. One of the natural features in the Zoo is a granite boulder weighing 30 tons but easily moved by hand. — The Zoo contains a restaurant.

The **Botanical Gardens** (adm., see p. 28), at the N. end of Bronx Park, contain extensive greenhouses, three small lakes, and a large museum known as the *Horticultural House*.

Bronx Park is reached by the Subway (pp. 16, 17), by the Third Ave. El.R.R. (Pelham Avenue), or by the Harlem Division of the New York Central R. R. to *Bronx Park* (5 c.), near the Horticultural House, or to *Fordham*, about 3/4 M. from the Zoo (carriages in waiting in summer).

Jerome Avenue, beginning at McComb's Dam Bridge (p. 70), and *Westchester Avenue* (Pl. Q, 5) are favourite drives (comp. p. 23). The former runs past the new *Jerome Park Reservoir* (1 1/2 M. by 1 M.), with a capacity of 2,000,000,000 gallons. The GRAND BOULEVARD & CONCOURSE (180 ft. wide), uniting Manhattan and the parks in the N. part of the Bronx, begins at the corner of Mott Ave. and 161st St. and extends thence to (4 1/2 M.) the *Mosholu Parkway*, connecting Bronx Park with Van Cortlandt Park. At the beginning of the Boulevard is the *Lorelei Fountain*, commemorating Heinrich Heine.

The Islands in the East River contain various charitable and correctional institutions belonging to the city or the state, permission to visit which may be obtained from the Commissioners of Public Charities, at the foot of E. 26th St. (ferry). *Blackwell's Island* (Pl. H-K, 5), 120 acres in extent, is a long narrow island, extending from about 50th St. to 86th St., and containing the Penitentiary, Female Lunatic Asylum, Workhouse, Alms Houses, Blind Asylum, and Charity Hospitals. To be 'sent to the Island' is the New York euphemism for committal to the Penitentiary. *Ward's Island* (Pl. M, N, 5; 200 acres), opposite 110th St., has the Manhattan State Lunatic Asylum, the State Emigrant Hospital, Houses of Refuge, a Children's Home, and a Soldiers' Home. Ward's Island is separated from Astoria and Blackwell's Island by *Hell Gate* (Pl. M, 5), a sharp bend in the river, through which the water rushes at a great rate. The sunken reefs which formerly made it highly dangerous to navigation were removed by nitro-glycerine explosions in 1876 and 1885. On *Randall's Island* (Pl. N, O, 5), to the N. of Ward's and opposite the Harlem River, are the Idiot Asylum, a House of Refuge, and the Nursery, Children's, and Infants' Hospitals.

Excursions are also made to various islands in New York Harbour (comp. p. 2).

(1.) **LIBERTY OR BEDLOE'S ISLAND** (frequent steamers from the Battery in a few minutes, comp. p. 33; return-fare 25 c.). The *Statue of Liberty, on Liberty or Bedloe's Island, presented to the United States by the French Republic, in commemoration of the 100th anniversary of the Declaration of Independence, was designed by *Auguste Bartholdi* and erect-

ed in 1886. It is 151 ft. high (to the top of the torch), is made of copper and iron, and weighs 225 tons. The granite pedestal on which it stands, designed by *R. M. Hunt*, is 155 ft. high and was contributed by citizens of the United States. A stairway ascends inside the figure to the head, which can accommodate 40 persons and commands a magnificent *View of New York and its vicinity (nearly as good from the first balcony). At night the torch is lit by electricity. Near the base of the statue is a tablet with an appropriate sonnet by *Miss Emma Lazarus*.

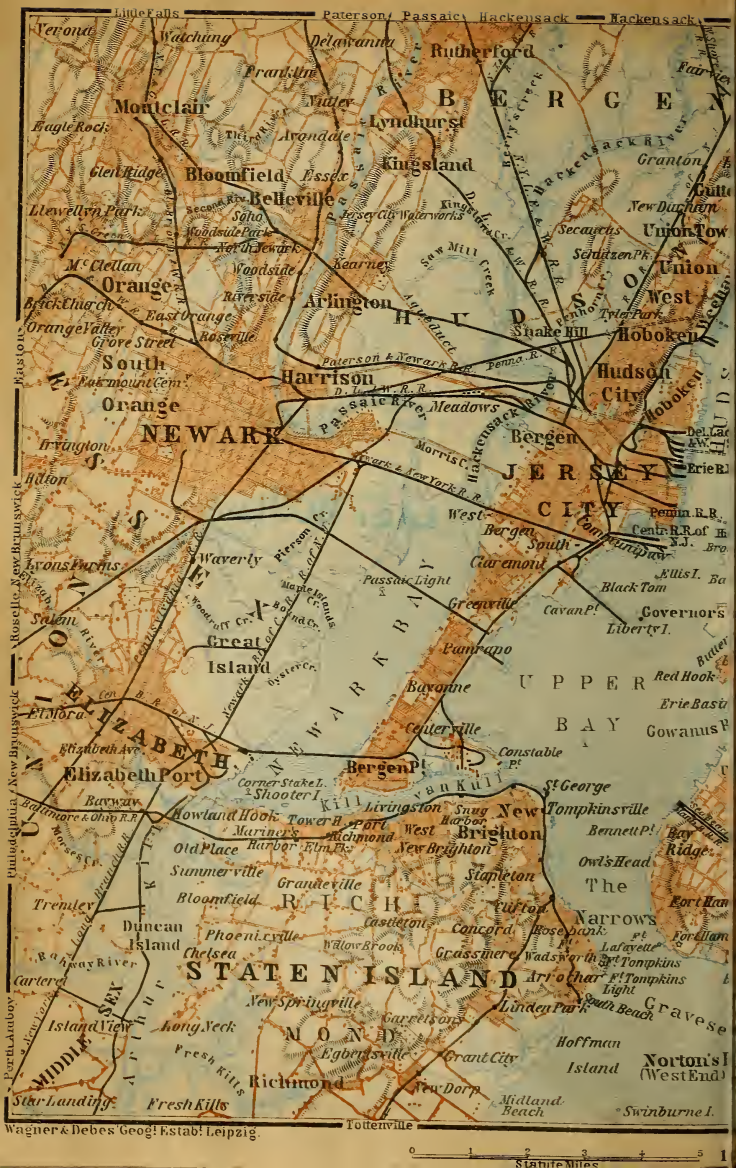
(2.) Ellis Island (steamers hourly from the Barge Office, p. 33; free). The trip to the immigrant-station on *Ellis Island forms one of the most interesting and suggestive experiences open to the visitor o New York. All are received with courtesy and are shown the chief points of interest by a guide appointed for the purpose. The original island was little more than an acre in extent but has since been increased by artificial means to an area of 11 acres. The numerous buildings include a very up-to-date hospital, completed in 1908. About 3000 immigrants land here every day (comp. p. 3), and are looked after by about 940 officials and employees under *Mr. Robert Watchorn*, Commissioner of Immigration. The arrangements for the reception of the polyglot immigrants and for forwarding them to their final destinations are of the most complete, ingeniou , and efficient character. The entire expense, including construction and repairs, is defrayed by the proceeds of a head-tax of $ 4 per alien.

(3.) Gove nor's Island (steamers, see p. 19). Comp. p. 2.

Environs of New York.

(1.) Staten Island (ferry from Whitehall St. to St. George in 1/4-1/2 hr.; fare to St. George 5c., thence to any other station between Erastina and South Beach 5c.). — Staten Island, on the S. side of New York Harbour, separated from New Jersey by the *Staten Island Sound* or *Arthur's Kill* and the *Kill van Kull* and from Long Island by the *Narrows* (p. 2), has an area of about 70 sq. M. and (1905) 72,845 inhabitants. It is conterminous with the *Borough of Richmond* (p. 30). The surface of the island is diversified and hilly (highest point, 415 ft.), and it is dotted with small villages and the villas of New Yorkers. The hills afford good views of New York Harbour and the ocean. Among the best of its fine drives is the *Richmond Terrace*, skirting the N. shore. From *St. George* (St. George Hotel) railways (Staten Island Rapid Transit) run to the W. along the N. shore, to the S.E. to *Fort Wadsworth* and *South Beach*, and to the S. to *Tottenville*, diverging from the South Beach line at Clifton. The first-mentioned line passes (1 M.) *New Brighton*, the largest village in the island, with numerous villas and hotels; 1 3/4 M. *Sailors' Snug Harbor*, with a large Seamen's Asylum (1000 inmates; income $ 400,000), on the lawn of which is a fine statue of its founder R. R. Randall, by Saint-Gaudens; 2 1/2 M. *Livingston*, with the Staten Island Cricket Club, the Staten Island Athletic Club, etc.; 4 M. *Port Richmond*, with the house (now a hotel), in which Aaron Burr died in 1836; 5 1/2 M. *Erastina* or *Mariner's Harbor* (Bayside), with the pleasure-resort called the Erastina Grove. Beyond Erastina the railway crosses the Sound to New Jersey. — At (1 M.) *Tompkinsville* (Nautilus), on the South Beach line, are the headquarters of the Seawanhaka Yacht Club (p. 23); 1 3/4 M. *Stapleton*, the birthplace of Commodore Cornelius Vanderbilt (1794-1877), who took the first step towards amassing his huge fortune by starting a ferry to New York; 2 1/2 M. *Clifton*, with a small wooden house once occupied by Garibaldi (ca. 1850) and now protected by a cement superstructure; 3 1/2 M. *Fort Wadsworth* (p. 2); 4 1/2 M. *Arrochar* (Arrochar Park Hotel); 5 1/2 M. *South* or *Richmond Beach*, with a hospital for crippled children. — The longest line is that running S. to Tottenville. Beyond Clifton (see above) it passes (6 M.) *Grant City* (Atlantic Inn), with the mausolea of the Vanderbilt family; 9 1/2 M. *Giffords*, a fishing-resort; 11 M. *Woods of Arden*, with picnic grounds; 13 M. *Princess Bay*, another fishing-place; 16 M. *Tottenville* (Excelsior Hotel), with the old Billopp House (ca. 1670), where Gen. Howe met Franklin and John Adams after the battle of Long Island

LAST BOSTON



Little Falls
Paterson
Passaic
Hackensack
Hackensack
Verona
Watchung
Delawanna
Rutherford
Franklin
Montclair
Nutley
B E R G E N
Eagle Rock
Lyndhurst
Avondale
Kingsland
Glen Ridge
Bloomfield
Essex
Belleville
Granton
Llewellyn Park
Soho
Woodside Park
North Newark
Jersey City Waterworks
Secaucus
New Durham
Union Tow
Schuyler Pk.
Union
Mc Clellan
Orange
Woodside
Kearney
Saw Mill Creek
Riverside
Arlington
West
Brick Church
East Orange
H U D S O N
Tyler Park
Orange Valley
Grove Street
Roseville
Snake Hill
Hoboken
South
Paterson & Newark R.R.
Penna. R.R.
Harrison
Hudson City
Fairmount Cem.
Orange
Passaic River
Meadows
Hoboken
NEWARK
Bergen
Irvington
Morris C.
Hackensack River
JERSEY
Hilton
Newark & New York R.R.
CITY
West
Bergen
Penna. R.R.
Centr. R.R. of N.J.
South
Communipaw
Waverly
Pierson Cr.
Claremont
Lyons Farms
Passaic Light
Ellis I.
Black Tom
Greenville
Cavan Pt.
Governors
Salem
Woodruff Cr.
Maple Islands Cr.
Bound Cr.
Liberty I.
Great
Island
Pamrapo
Oyster Cr.
Red Hook
Bayonne
UPPER
Erie Basin
El Mora
Centerville
BAY
Gowanus
Elizabeth Ave.
Constable Pt.
ELIZABETH
Bergen Pt.
Elizabeth Port
Corner Stake L.
Shooter I.
St. George
Bayway
Kill van Kull
Livingston
Snug Harbor
New
Tompkinsville
Howland Hook
Tower H.
Port
Mariner's
Richmond
West
Brighton
Bennett Pt.
Bay Ridge
Old Place
Harbor
Elm Pk.
New Brighton
Owl's Head
Summerville
Stapleton
Granite ville
The
Tremley
Bloomfield
R I C H
Clifton
Narrows
Fort Ham
Duncan
Island
Castleton
Concord
Rosebank
Phoenixville
Willow Brook
Lafayette
Chelsea
Grassmere
Wadsworth
Ft. Tompkins
Rahway River
STATEN ISLAND
Arrochar
Ft. Tompkins Light
Carteret
New Springville
Linden Park
South Beach
Gravese
Island View
Long Neck
Garretsony
M O N D
Hoffman
Island
Norton's I
(West End)
Egbertsville
Grant City
Fresh Kills
Richmond
New Dorp
Midland Beach
Star Landing
Fresh Kills
Swinburne I.
Tottenville
Wagner & Debes Geog. Estab. Leipzig.
Statute Miles
Easton
Roselle
New Brunswick
New Brunswick
Philadelphia
Perth Amboy

Yonkers
Chatham
New Haven
Pelham ville
New Rochelle
Mt Vernon
Riverdale
Van Cortlandt Park
Woodlawn Cemet.
Wakefield
Davenport Neck
Pelham Manor
East Chester
David's I.
Spuyten Duyvil
Kingsbridge
Williamsbridge
Hunter I.
Bartow Sta.
THE BRONX
Botan. G.
Bronx Pk.
Fordham
St. John's Col.
Baychester
Rodman Neck
LONG
Linwood
New York University
Belmont
Hart's I.
Washington
Tremont
Zoo Pk.
Pelham Bay Park
Pelham Bay
ISLAND
Ft. Lee
High Br.
West Farms
City I.
Crotona Pk.
Westchester
Hewlett's Pt.
Claremont
Melrose
Morrisania
Unionport
SOUND
Undercliff
Manhattan ville
Hunts Point
Mott Haven
Casanovia
Harlem
Port Morris
Throg's Neck
Elm Point
Old Ferry Pt.
Ft. Schuyler
NORTH RIVER
Harlem River
Bronx Riv.
Cornell's Neck
Westchester Cr.
Classon Pt.
N. Brother
Hunt Pt.
East River
Whitestone Pt.
Willet's Pt.
Ft. Totten
Randall's I.
S. Brother
Riker's I.
College Pt.
Lawrence Pt.
Ward's Island
Berrian's I.
Little Neck Bay
Whitestone
Hell Gate
Sanford Pt.
Strattonport
Steinway
Flushing Bay
Astoria
Central Park
Blackwell's Island
Newtown
Broadway
Bay Side
Ravenswood
Long Island R.R.
Flushing
Grand Centr. Dep.
LONG ISLAND CITY
Corona
Golf Club
Woodside
Hunter's Point
Winfield
N. Side Div. R.R.
Kissena
Long Id. R.R. Dep.
Blissville
Corona Park
Junction
Flushing Creek
Greenpoint
Laurel Hill
Frankiston
Maspeth
Columbusville
Long Island R.R.
QUEENS
Linden Hill
Middle Village
Williamsburg
East Williamsburg
Hollis
Wallabout Bay
Bushwick Sta.
Fresh Pond
L.I.R.R.
Maple Grove
Glendale
Kichmond Hill
Navy Yard
Bushwick
Cypress Hills
Jamaica
Far Rockaway Beach R.R.
BROOKLYN
Ridgewood
Brooklyn Res.
Evergreen Cem.
Woodhaven
Woodhaven Jct.
Ozone Park
Br. & Brighton B. Sta.
Brooklyn Inst.
Jamaica South
Aqueduct
Springfield
East New York
Prospect Park
Flatbush
Old Mill Cr.
Cornell's Cr.
Far Rockaway
Canarsie
Hossack Cr.
Kensington
JAMAICA BAY
Green Pt.
Parkville
Canarsie Landg.
East High
Rulers Bar
Head of Bay
Flatlands
Duck Pt. Marshes
Hassock Meadow
South Greenfield
Bergen Island
JoCo's Marsh
Stony Cr. Marsh
Yellow Bar Hassock
Far Rockaway
Garritsons Cr.
Silver Hole M.
Big Egg Marsh
Ruffle Bar
Edgemere
Bay of Far Rockaway
Sheepshead Bay
Deep Cr.
Little Bay
Little Egg M.
Arverne
Plumb Beach
Sheepshead Bay
Barren I.
Rockaway Inlet
Rockaway Beach
Oriental Hot.
Dead Horse Inlet
Manhattan Beach
Brighton B.
Brighton
Kilometres
0 1 2 3 4 5 6 7 8

(p. 75). Tottenville is connected by ferry with *Perth Amboy* (p. 176). — Electric Tramways, mostly starting at St. George, also traverse the island in various directions (to *Prohibition Park*, *Midland Beach*, etc.).

(2.) New Jersey Shore. The cities on the right bank of the Hudson or N. River, immediately opposite New York, though practically forming part of that city, are in a different state (New Jersey) and under independent government. They offer little of special interest for the tourist. Ferries, see p. 19. — **Jersey City** (*Hotel Washington*, R. from $ 1), the southernmost and largest, with a population of (1905) 232,699, contains many glassworks, sugar-refineries, machine-shops, foundries, and other industrial establishments, the stations of several of the railways centring at New York (comp. p. 10), and the docks of a few of the Transatlantic steamship companies. With the exception of a few churches, the People's Palace (1905), and the city-hall, it has almost no handsome buildings. On the roof of *Colgate's Soap Factory* is a clock-dial 38 ft. in diameter. — To the N. of Jersey City lies **Hoboken** (*Meyer's Hotel*, $ 2½-3, R. from $ 1; *Nägeli's Hotel*, $ 2½-4, R. from $ 1½), now connected with New York by electric cars running below the Hudson (pp. 10, 54). It has important silk-factories and (1905) 65,468 inhab., a large proportion of whom are Germans, and also contains the wharves of some of the European steamships. *Stevens Park*, on the river, contains the *Stevens Institute*, a polytechnic school of good reputation. *Castle Stevens*, the house of its founder, the late Commodore Stevens, is on the hill above. Farther to the N. lies *Weehawken*, with (1905) 8027 inhabitants. It was the scene of the duel between Alex. Hamilton and Aaron Burr; and the boulder on which the former fell when shot is railed in on the edge of the bluff, to which it was carried up from the scene of the duel below. On it is a bust of Hamilton. An electric tramway runs hence along the Palisades (fine views) to *Hudson Heights* (5 c.), *Edgewater* (10 c.), *Fort Lee* (see below), *Linwood* or *Coytesville* (20 c.), and *Englewood* (see below). — *Guttenberg* (4565 inhab.), on the hill behind Weehawken, has a large brewery, with a beer-garden on the roof. — *Fort Lee*, on the site of the revolutionary fort of that name, at the point where the higher part of the *Palisades* (p. 83) begins, nearly opposite 170th St., now belongs to an Association, which has built a hotel and pavilion and laid out the small Palisades Park. Boating and bathing are among the attractions. It is reached by ferry from Canal St. (15 c.), or by ferry from 130th St. to *Edgewater* (see above) and thence (1½ M.) by electric car. The car-ride may be extended to the N. to *Englewood* (Palisade Ho., Park Hotel, $ 2).

(3.) *Brooklyn*, *Coney Island*, and other resorts on *Long Island*, see R. 3.

Among other points to which excursions are easily made from New York are *Long Branch* and the other seaside resorts of the New Jersey coast (see R. 18); *Yonkers*, *Dobbs Ferry*, *Tarrytown*, and other points on the Hudson (see R. 4); *New Rochelle*, and other places on Long Island Sound (R. 30); and *Greenwood Lake* (p. 142).

From New York to Putnam Junction (Brewster), 54 M., railway (*Putnam Division of N. Y. C. & H. R. R. R.*) in 2-2¼ hrs. This line, passing the suburban resorts of *Westchester County*, begins at the 155th St. station of the Sixth Ave. Elevated Railroad (comp. p. 70). — 1 M. *High Bridge* (p. 70); 2 M. *Morris Heights*. — 2½ M. *University Heights*, with the handsome new buildings of New York University (comp. p. 46). These buildings, splendidly situated on a high bluff commanding a fine view of the Harlem, the Hudson, the Palisades, and Long Island Sound, include a beautiful Library, designed by Stanford White (85,000 vols.; especially rich in Oriental and Germanic literature), a Hall of Languages, a Chemical Laboratory, a gymnasium, etc. The Hall of Fame for Great Americans, presented by Miss Helen Gould and half encircling the library, contains panels with the names of distinguished Americans. The first five selected were Washington, Lincoln, Webster, Franklin, and Grant; Emma Willard, Mary Lyon, and Maria Mitchell represent women. The university, which was founded in 1830 as an undenominational corporation on a liberal basis, is now attended by 4000 students, taught by 215 instructors. Near the university, at the corner of Sedgwick Ave. and 188th St., is *Webb's Academy & Home for Shipbuilders*. In Kingsbridge Road, Fordham, is a

cottage in which E. A. Poe lived from 1844 to 1849 and wrote 'Ulalume', 'Annabel Lee', etc. — 5 M. *Van Cortlandt*, the station for Van Cortlandt Park (p. 70), is the junction of a branch-line to (3 M.) Yonkers (p. 86). — At (8 M.) *Dunwoodie*, with a large Roman Catholic college, we pass over the Croton Aqueduct (p. 70). — 13 M. *Mt. Hope*, with a well-known golf-club. — 21½ M. *Tarrytown* (p. 87); 23 M. *Pocantico Hills* (Berkeley Inn); 27 M. *Briarcliff Manor* (Briarcliff Lodge). At (33½ M.) *Croton Lake* we cross the lake by a lofty bridge. 42 M. *Baldwin Place*, the junction for (2 M.) *Mahopac Falls;* 45 M. *Lake Mahopac* (Dean House, $ 3½), a summer-resort; 49½ M. *Carmel*, on *Lake Gleneida*. At (54 M.) *Putnam Junction (Brewster)* we join the line described below.

From New York to Chatham, 127 M., railway *(Harlem Division of N. Y. C. & H. R. R. R.)* in 3½-4½ hrs. — From New York to (12 M.) *Woodlawn*, see R. 30a. Our line crosses the boundary of Greater New York (p. 29) and follows the course of the *Bronx River* (to the left). 15½ M. *Bronxville* (Gramatan Hotel, a large house open throughout the year, from $ 4); 22½ M. *White Plains*. 25 M. *Kensico*, near *Lake Kensico*, is to be the site of the huge storage reservoir (4,000,000,000 gallons) to be erected in connection with the new Ashokan Dam (p. 101) of the New York water supply. 37 M. *Mt. Kisco;* 44 M. *Golden's Bridge*, the junction of a line to (7 M.) *Lake Mahopac* (see above); 52 M. *Brewster*, junction of the N. H. R. R. to Hartford (see p. 239); 76 M. *Dover Plains*. — 85 M. *Sharon*, a pretty New England village, where Burgoyne's soldiers were interned after the battle of Saratoga (p. 120). It is the seat of a Moravian Colony. — 92½ M. *Millerton* (p. 87); 104½ M. *Copake Iron Works*, 5 M. from Mt. Everett (p. 338). At (127 M.) *Chatham* we reach the Boston & Albany R. R. (see p. 334).

3. Brooklyn and Long Island.

Coney Island. Rockaway Beach.

Brooklyn. — Railway Stations. *Flatbush Avenue Station* (Pl. D, 3), Flatbush Ave., cor. Atlantic and Nostrand Aves., and *Bushwick Station*, for the Long Island Railroad.

Hotels. St. George (Pl. a; C, 1), 51 Clark St., $ 3-5, R. from $ 1; Margaret (Pl. b; C, 1), 97 Columbia Heights, from $ 3½; Mansion House (Pl. c; C, 2), 137-153 Hicks St., Brooklyn Heights, $ 3-5, all near Brooklyn Bridge; Clarendon, Washington St., R. from $ 1½; Brevoort, Bedford Ave.; Carleton, 8th St., R. from $ 1.

Restaurants at the hotels; also, *Parker's*, Willoughby St. (Pl. C, D, 2); *Silsbe's*, 629 Fulton St., *Dennett's*, *Childs'*, 355 and 368 Fulton St. (comp. p. 14); *Edgett's*, 556 Fulton St.

Elevated Railroads. Several lines of Elevated Railway, similar to those in New York (p. 15), traverse Brooklyn in various directions (fare 5c.). Four of these begin at the New York end of Brooklyn Bridge (with branches to Fulton Ferry), and two start at the foot of Broadway (opp. Grand St., New York). Comp. p. 16. — Subway, see p. 16. — Bridge Cars, see pp. 16, 40. — Ferries to New York, see p. 19.

Tramways, propelled by electricity ('trolley lines'), traverse Brooklyn in all directions and extend to the Ocean resorts at Coney Island, etc. Most of them now start at the New York end of the Brooklyn Bridge (p. 40), the toll for crossing which is included in the fare of 5 c.

Post Office, see p. 75.

Brooklyn, with a population (1905) of 1,358,686, was formerly the fourth city of the United States in size and industrial interest, but now forms one of the boroughs of Greater New York (see p. 30). It lies immediately opposite New York, at the W. end of Long Island, and covers an area of about 65 sq. M. It is popularly known as the 'City of Churches', containing no fewer than 600 ecclesiastical

residences have been sunk into the front of these bluffs, forming a series of unique 'cave dwellings'. The chief street of the 'Heights'

land, and covers an area of about 60 sq. M. It is popularly known as the 'City of Churches', containing no fewer than 600 ecclesiastical

edifices, and has also been called the 'Dormitory of New York' from the fact that so many of its residents are New York business men and women, returning to Brooklyn in the evening.

Brooklyn (Breuckelen) was founded by Walloons in 1623, the first settlement being near Wallabout Bay (p. 76). The most outstanding event in its history is the battle of Long Island (Aug. 26th, 1776), fought on the heights behind the town, in which the British defeated the Americans (see p. 77). It was incorporated as a town in 1788, when its population did not exceed 1500. and as a city in 1834 (pop. about 30,000). — The annual value of Brooklyn's manufactures is about $ 300,000,000 (60,000,000*l.*). They include sugar and oil refining, ship-building, meat-packing, and the making of chemicals, cordage, carpets, and boilers. Its commerce is also very important. In 1890 Brooklyn contained 838,547 inhabitants. — *King's* 'Views of Brooklyn' ($ 1½) resembles his New York book (p. 28).

Fulton Street (Pl. C-F, 2, 3), the Broadway of Brooklyn, begins at Fulton Ferry (p. 19), almost under the shadow of Brooklyn Bridge, and runs hence first to the S. and then to the E., with a total length of 6 M. It is traversed by the Elevated Railroad and several tramways. Following it from the bridge or ferry, we soon reach (10 min.) an open space in front of the **Borough Hall** (Pl. C, 2), a white marble building, with an Ionic portico and a tower. Opposite is a spirited statue of *Henry Ward Beecher* (see p. 76), by J. Q. A. Ward. To the S. of Borough Hall, in Joralemon St., is the *Municipal Department Building*, to the E. of which stand the **County Court House** (Pl. C, 2), an edifice in a Corinthian style, and the *Hall of Records* (recently heightened and enlarged). Behind the Court House, facing Livingston St., is the *Polytechnic Institute* (Pl. C, 2). At the corner of Washington St. and Johnson St., a little to the N. of Borough Hall Square, is the ***Post Office** (Pl. C, 2), a really fine building, but not seen to advantage. Adjacent is the tall building of the *Brooklyn Daily Eagle*, a model newspaper office, to which visitors are welcome (large Information Bureau).

From Borough Hall Square Montague Street (Pl. C, 2) leads W. to the river, ending in a terrace which commands an excellent *View of New York and the harbour. This street contains the *Art Association Building* (exhibitions of pictures), and the Reference Department of the *Brooklyn Public Library*, which has 28 branches and possesses ca. 550,000 vols. The district in which we now find ourselves, known as ***Brooklyn Heights**, is the pleasantest part of the city and contains many of the finest residences. In this quarter are the chief hotels mentioned at p. 74, numerous large apartment houses, and many of the leading clubs (Brooklyn, Crescent Athletic, Excelsior, Germania, Hamilton, Jefferson, Pl. 1, 2, 3, 4, 5, 6; C, 2). In front of the Hamilton Club (cor. Remsen and Clinton Sts.) is a *Statue of Alex Hamilton*, by W. O. Partridge (1898). The 'Heights' (Pl. C, 1) rise abruptly from the river to an elevation of 70-100 ft., leaving at their base room for a single narrow street. Stores and residences have been sunk into the front of these bluffs, forming a series of unique 'cave dwellings'. The chief street of the 'Heights'

and a fashionable Sunday promenade is Clinton Street (Pl. C, B, 2-5), extending from Fulton St. (crossing Montague St.) to *Gowanus Bay*. In this street, at the corner of Pierrepont St. (the street before Montague St.), is the handsome building of the **Long Island Historical Society** (Pl. C, 2), which possesses a library of 75,000 vols. and a small museum. In Pierrepont St. are the *Dutch Reformed Church* (Pl. C, 2) and the Unitarian *Church of the Saviour* (cor. of Monroe Place; Pl. C, 2). At the corner of Montague St. is *Holy Trinity Church* (Pl. C, 2), the leading Episcopal church of Brooklyn (good music). In Remsen St., the next cross-street, at the corner of Henry St., is the Congregational *Church of the Pilgrims* (Pl. C, 2), with a piece of the original 'Plymouth Rock' (see p. 276) immured in its façade. A little farther on in Clinton St., at the corner of Livingston St. (left), is the *Church of St. Ann* (Episcopal; Pl. C, 2). Clinton St. then crosses Atlantic Avenue (Pl. B-F, 2-4), a wide and busy street descending on the right to the ferry for Whitehall St., New York (p. 19).

Plymouth Church (Pl. C, 1), the most famous ecclesiastical edifice in Brooklyn, where *Henry Ward Beecher* (d. 1887) drew crowds for 40 years, stands at the N. end of the Heights, in Orange St., between Hicks St. and Henry St., 1/3 M. from Brooklyn Bridge. It is a large building without architectural pretensions.

Returning to Borough Hall and continuing to follow Fulton St. towards the E., we soon reach, at the corner of Bond St. (right), the building of the *Young Men's Christian Association* (Pl. D, 2), with a fine gymnasium. At St. Felix St., 1/2 M. farther on, is the new *Academy of Music* (Pl. D, 3), a notable example of polychromatic brick architecture, opened in 1908. Fort Greene Place, just beyond this point, leads to the left to the small (3 min.) *Fort Greene Park* (Pl. D, E, 2), laid out on the site of the Revolutionary earthworks known as Fort Greene and containing a statue of General Fowler and a monument erected in 1908 to the memory of the prison-ship martyrs. Clinton Avenue (Pl. E, 1-3), nine blocks farther on, is, perhaps, the handsomest street in Brooklyn.

In Ryerson St., between Willoughby and De Kalb Avenues, about 1/4 M. to the E. of Clinton Ave., are the extensive buildings of the *Pratt Institute (Pl. F, 2), one of the best equipped technical institutions in the country, founded and endowed in 1884-87 by Mr. Charles Pratt, 'to promote manual and industrial education, and to inculcate habits of industry and thrift'. Its schools of fine and applied arts, technology, domestic science and arts, library training, etc., are attended by 3800 students. Visitors are admitted on Mon., Wed., & Frid., 10-12, 2-4, and 7.30-9. The Library contains 90,000 vols. and a large collection of prints and photographs. All interested in technical education should visit this institution (appointment made on written application; schools closed, June 1st to Oct. 1st).

Clinton Avenue ends on the N. at the **U.S. Navy Yard** (Pl. D, E, 1) on *Wallabout Bay*, the chief naval station in the country, employing 4000 men (open on week-days, 9-5; adm. on Sun. and holidays by pass obtained from the Captain of the Yard; entr. in Navy St., opposite Sands St.). The yard covers 197 acres, of which 68 are water.

Among the most prominent features of the yard are three Dry Docks, 326 ft., 442 ft., and 595 ft. long respectively. Some war-vessels are generally moored here, while others are on the stocks. To the E. is the *U. S. Naval Hospital* (Pl. F, 1), with its pillared front. — Between the Navy Yard and the Hospital is the immense *Wallabout Market* (Pl. E, F, 1). Its brick buildings, in the Dutch style, include a quaint clock-tower.

The largest of the Docks of Brooklyn is the *Atlantic Basin* (Pl. A, B, 3), 1½ M. to the S. of the Bridge, with an area of 40 acres and 2 M. of wharfage. The *Erie Docks* (Pl. A, 5) lie ¾ M. farther to the S., on Gowanus Bay.

Perhaps Brooklyn's chief attraction for strangers is the beautiful ***Prospect Park** (Pl. D, E, F, 4-7), finely situated on an elevated ridge in the S.W. part of the city and commanding excellent views of Brooklyn, New York, the harbour, the ocean, and Long Island.

The principal entrance is at the end of Flatbush Ave. (Pl. E, 4; tramway from Fulton Ferry), and the Plaza in front of it is adorned with a **Memorial Arch* for soldiers and sailors of the Civil War, surmounted by a fine quadriga and flanked with groups representing the Army and Navy, by Fred. MacMonnies (b. at Brooklyn in 1864), and with fine statues, both also by MacMonnies, of *James Stranahan* (1808-98) and *General Slocum* (1827-94). Drive through the park in the park-carriages 25 c. each. The water-tower near the main entrance furnishes the finest view of the city and island.

Prospect Park, which has an area of 520 acres, is not so elaborately laid out as Central Park, but has, perhaps, more natural beauty. It contains many fine trees. The lake at the S. side is 60 acres in extent. On the slope of *Look-Out Hill* (185 ft. above the sea) is a *Monument* (erected in 1895) in memory of the Maryland troops who fell in the battle of Long Island (p. 75), which is also commemorated by a tablet in *Battle Pass*. Concerts are given here on Sat. and Sun. afternoons in summer. In other parts of the park are a bust of *John Howard Payne* (1792-1852; comp. pp 81, 227), author of 'Home, Sweet Home' (p. 165), statues of *Lincoln* and *Gen. G. K. Warren*, and several other monuments. — From the Plaza the *Eastern Parkway* (Pl. E, F, 4, 5), a fine boulevard, 200 ft. wide, runs E. to the (2½ M.) part of Brooklyn known as *East New York*. Near the S. entrance begins the **Ocean Parkway* (Pl. F, E, 6, 7), a similar boulevard, which runs all the way to (5 M.) *Coney Island* (p. 79) and forms one of the pleasantest approaches to that resort. It is flanked on either side by a broad cycle-path. The *Drive from Prospect Park to *Fort Hamilton* (p. 2; 4½ M.; Crescent Club House) affords continuous views of New York Harbour.

On the opposite side of Flatbush Ave. (see above) lies the **Institute Park**, 58 acres in extent and opened to the public in 1903.

Ninth Avenue (or Prospect Park West, Pl. E, D, 4-6) and other streets adjoining Prospect Park contain some of the finest residences in Brooklyn. Among the largest and handsomest buildings bordering on the Park are the huge *Riding and Driving Club* (near the Plaza; Pl. E, 4) and the *Montauk Club* (cor. 8th Ave.; Pl. E, 4).

The **Brooklyn Institute of Arts and Sciences** (Pl. F, 4), founded in 1824 and rechartered in 1890, is an academy of arts and sciences with about 7000 members. It contains 29 departments, each of which holds regular meetings and courses of lectures. A grant of 12 acres of land in *Institute Park* (see above) has been made to the Institute, which has erected on it three sections (1897, 1903, and 1907) of a large Museum building, which is intended ultimately to be 560 ft. square. This building (open 9-6, Sun. 2-6, also on Thurs. 7.30-9.45; adm. on Mon. & Tues. 25 c., children 10 c.;

at other times free) contains lecture-halls, class-rooms, laboratories, and collections of *Fine Arts*, *Ethnology*, and *Natural History*. The statues on the exterior, representing the genius of the Classical and Oriental peoples, were executed under the general direction of *Dan. C. French*. The *Children's Museum* at Bedford Park is open free, daily, 9-6 (Sun. 2-6). The larger part of the educational work of the Institute is conducted in the Academy of Music Building (p. 76).

Following Ninth Avenue towards the S. from the S.W. entrance of Prospect Park, we soon reach (1/2 M.) the N.E. entrance of *Greenwood Cemetery (Pl. B, C, D, 6, 7), one of the most beautiful cities of the dead in America, rivalling Prospect Park in the charms of its undulating surface and extensive views. It is 475 acres in extent. Carriages take passengers round the chief points for 25 c. each.

The principal (N.) entrance is in Fifth Ave. (cor. 25th St.; Pl. C, 6). The entrance gateway is an elaborate structure of brown stone, 142 ft. wide, with bas-reliefs and a tower 100 ft. high. Plans of the cemetery may be obtained here (10 c.), showing the positions of the graves. Among the monuments of special interest, either from their subject or treatment, are those to the *New York Volunteers* (Section H), *Roger Williams* (p. 244; Sec. 130), *De Witt Clinton* (p. 92; 108), *Elias P. Howe* (the inventor of the sewing machine; H), *S. F. B. Morse* (p. 274; 25), *Henry George* (1839-97), the founder of the 'Single Tax' movement (at the top of Ocean Hill), the magnificent mausoleum of *John W. McKay*, *Horace Greeley* (p. 39; 35), *Henry Ward Beecher* (p. 76; 140), *Lola Montez*, *John Matthews* (64), the *Pilots* (111), the *Firemen* (2), *Peter Cooper* (p. 42; 101), *A. S. Scribner* (160), *James Gordon Bennett* (107), *Charlotte Canda* (92), and the *Brooklyn Theatre Fire Victims* (N). One of the chief attractions of Greenwood is the beauty of the blossoming of the dog-wood (*Cornus Florida*) at the end of May or beginning of June.

Among other points of more or less interest not included in the above rapid survey are the *Roman Catholic Cathedral* (Pl. E, 3), Clermont Ave., near Greene Ave.; the *Equestrian Statue of General U. S. Grant* (p. 68), by W. O. Partridge, in front of the *Union League Club*, Bedford Ave. (1896; beyond Pl. F, 4); the *Fire Headquarters*, in Jay St. (Pl. D, 1, 2); the *Armouries* of the 14th and 23rd Regiments, in Eighth Ave. (Pl. D, 5) and Bedford Ave. (beyond Pl. F, 3); the *Long Island College Hospital* and *St. Peter's Hospital* (Pl. C, 2, 3), in Henry St.; *St. Mary's Hospital*, in Buffalo Ave.; the *Bedford Library*, Bedford Ave. (90,000 vols.); the Roman Catholic church of *St. Augustine* (Pl. E, 4), cor. Sixth Ave. and Sterling Place; the *Reformed Church* (Pl. D, E, 4), cor. Seventh Ave. and Carroll St.; the *Young Women's Christian Association* (Pl. D, 3), cor. Flatbush Ave. and Schermerhorn St.; and the *Cemetery of the Evergreens* (beyond Pl. F, 3).

Brooklyn Forest Park, in the N.E. part of the borough, is 540 acres in area and deserves a visit for its fine trees and beautiful views.

To the N. of Brooklyn, and separated from it by *Newtown Creek*, lies Long Island City (*Long Island City Hotel*, R. from $1), with (1900) 48,272 inhabitants. It is made up of *Hunter's Point*, *Astoria*, and *Ravenswood*, the last of which contains pleasant residences and extensive nurseries. In Hunter's Point (ferry to 34th St., New York) is the terminus of the *Long Island Railroad* (trains for all points in Long Island; comp. Pl. G, 5). Long Island City and adjacent points will some day also be reached from New York (Manhattan) by electric trains running through the so-called *Belmont Tunnel* (Pl. G, 1, 2), which begins at the foot of E. 42nd St.

Long Island, a narrow, fish-shaped island, 120 M. long and 8-20 M. wide, extends along the coast of New York and Connecticut from the mouth of the Hudson to a point beyond the mouth of the Connecticut River, enclosing between itself and the mainland the comparatively sheltered waterway of *Long Island Sound* (p. 247). Its area is 1680 sq. M. and its population (1905) 1,788,056 (incl. Brooklyn). The surface is generally level. A sandy barrier, at some distance from the main shore, extends along nearly the whole S. coast of the island, broken at intervals by narrow inlets; and here are situated Coney Island and other popular seaside-resorts of the New Yorkers. The N. shore is hilly and well-wooded. In the E. part of the island are several summer-resorts of a higher class than Coney Island, affording good sea-bathing, sailing, fishing, shooting, and golfing. Some of the oldest settlements in the state are on Long Island, and the historical student will find many points of interest. Comp. the annual guidebook of the Long Island Railroad.

Coney Island, the name given to the westernmost section of the flat sand-bar above mentioned, is a strip of white sand, 5 M. long and 1/4-1 M. wide, separated from the mainland by a small creek and from the next section of the bar (Rockaway Beach) by a narrow inlet opening into Jamaica Bay. The island is divided into four distinct parts: *West End*, *West Brighton*, *Brighton Beach*, and *Manhattan Beach*. Those who merely wish to see Coney Island for a few hours should go to West Brighton and return viâ Manhattan Beach. The hotels at the latter are the best places to pass the night. It is estimated that at least 10 million visitors resort to Coney Island every season (June-Sept.), and 100,000-200,000 are sometimes there on the same day. The prices at the hotels and restaurants are highest at the E. end, and lowest at the W. end of the island.

West End or *Norton's Point* (Norton's Hotel), the old original Coney Island, now known as *Sea Gate*, has a number of pleasant residences and the headquarters of the Atlantic Yacht Club. It is connected with Brighton and West Brighton by electric cars.

West Brighton, about the middle of the island, is the most crowded and characteristic part of it; and the scene here on a fine Sunday in summer beggars description. The beach swarms with all the peripatetic shows of a popular seaside-resort; and among the permanent attractions are two iron *Piers* (1000-1300 ft. long), *Luna Park* (fine illuminations at night; 600,000 electric lights), *Dreamland*, and a tall '*Observatory*' (°View). West Brighton may be reached from New York by steamer from Pier 1 (at the Battery) or from W. 22nd St. (return-fare 25 c.); from Brooklyn, by electric car, by the Brooklyn Elevated R. R., or by the Ocean Parkway (p. 77). It is connected with (3/4 M.) Brighton Beach by a fine drive called the *Concourse* and by an elevated railroad (5 c.).

Brighton Beach (*Brighton Beach Hotel*) consists of a huge hotel, a refreshment pavilion, several bathing-houses, and a theatre, in which variety actors perform in summer. It is specially frequented by the Brooklynites, who reach it viâ West Brighton (see above) or by direct trolley-lines. Brighton Beach is connected with Manhattan Beach (see below) by a small *Marine Railway* (5 c.); a barrier prevents walking along the sands.

Manhattan Beach (*Manhattan Beach Hotel*, R. $ 2-5, a huge wooden structure; *Oriental*, from $ 5, for more permanent guests) is the most fashionable part of Coney Island and the most comfortable for ordinary tastes. The hotels have large pleasure-grounds and bathing accommodations for many hundreds of visitors (adm. to amphitheatre overlooking the Manhattan bathing enclosure, 10 c.), and good bands play afternoon and evening. The beach is illuminated by electricity, and a display of

fireworks is given almost nightly. Manhattan Beach may be reached from New York by ferry to Hunter's Point (see p. 19) and thence by train; from the Flatbush Ave. station at Brooklyn (return-fare 20 c.); or by electric cars from Brooklyn Bridge and from Broadway and Fulton St. Ferries.

Rockaway Beach (numerous hotels, at about $ 2 a day), the next section of the sand-bar, is a less crowded and somewhat cheaper edition of Coney Island. The trip to it from New York by steamer (1½ hr.; return-fare 50 c.; see advts. in daily papers) affords an excellent survey of New York Harbour and Coney Island. It may also be reached by railway from Long Island City (34th St. ferry; comp. p. 78). A tubular iron pier extends into the ocean for 1200 ft. — Farther to the E. are the summer-resorts of *Arverne*, *Edgemere*, and *Far Rockaway*.

Long Beach (**Long Beach Hotel*, rebuilt in 1908, $ 4-5; *The Inn*, from $ 2½), the next sand-strip, is one of the best bathing-beaches on Long Island, and is frequented by summer residents rather than by excursionists. It is reached by railway viâ Long Island City (comp. p. 78; return-fare 80 c.). Farther to the E. is the *Great South Beach*, a curious strip of sand 40 M. long and ¼-5 M. wide. *Fire Island* (Surf Hotel), at its W. extremity, is reached by ferry from (8 M.) *Bayshore* (p. 81). The light of Fire Island Lighthouse is often the first object in America seen by the visitor from Europe, and the signal-station here announces the approach of the steamers 4 hrs. before they reach their docks (comp. p. 2). The *Great South Bay*, between the South Beach and the main coast, is a favourite shooting (wild-fowl) and fishing ground, and the villages along its shores (on the S. division of the Long Island R. R., see p. 81) are much frequented in summer by New Yorkers.

The other points on Long Island are all reached by the Long Island Railway, the chief divisions of which are given below.

From Brooklyn to Greenport, 94 M., railway in 2½-3 hrs. (fare $ 2.80). This is the main line; the trains start at Flatbush Ave. Station (p. 74), and are joined at Jamaica (see below) by simultaneous sections from Long Island City (p. 78). — From (7 M.) *Woodhaven Junction* a branch-line runs to *Rockaway Beach* (see above). — 9½ M. *Jamaica*, the junction of the Montauk Division (see below); 13 M. *Queens*, the station for *Creedmoor* (p. 24). 15 M. *Floral Park* is the junction of the so-called 'Central Branch', running viâ (3½ M.) *Garden City*, junction for (1½ M.) Hempstead (see below), to (21 M.) Babylon (p. 81). The numerous trains running by this branch from Flatbush Ave. to Garden City and Hempstead are operated by electricity. Garden City (*Garden City Hotel*, from $ 5), was laid out by A. T. Stewart as a model suburban residence for New Yorkers and contains a handsome Episcopal cathedral built by him. Adjacent is *Hempstead* (see above), close to which are the headquarters of the *Meadowbrook Hunt Club*, with a good golf-course. — Beyond Floral Park we quit the *Borough of Queens* (Greater New York). — 18½ M. *Mineola*, the junction of lines running N. to *Sea Cliff*, *Glen Cove* (with the fine mausoleum of Mr. Charles Pratt, p. 76), and *Oyster Bay* (with the home of President Roosevelt; good yachting), and S. to *Valley Stream* (p. 81). — 25 M. *Hicksville* is the junction of a branch-line to *Cold Spring* (with a large and important biological station), *Huntington* (Château des Beaux-Arts, R. from $ 2), *Setauket*, *Port Jefferson*, *Wading River*, and other resorts on the N. shore. — 41 M. *Brentwood*, a pleasant resort among the pines; 48 M. *Ronkonkoma*, station for the lake of that name (Lake Front, $ 2-3); 65 M. *Manor*, junction of a short line to Eastport (p. 81). We skirt the N. shore of *Peconic Bay*. — 94 M. Greenport (*Booth House*, $ 3; *Wyandank Hotel*, $ 2-2½), a fishing-village and sea-bathing resort near the E. end of Long Island. — A steam-ferry plies hence to Shelter Island (*Prospect Ho.*, *Manhanset Ho.*, $ 4; *Wray's Hotel*, $ 2½-3), in *Gardiner's Bay*, much frequented by New Yorkers in summer. The early records of the Quakers here are full of interest.

From Brooklyn to Montauk, 116 M., railway in 3-3½ hrs. (fares $ 3.45). This line, which gives access to the resorts on the S. shore of Long Is-

land, diverges to the right from that just described at (9½ M.) *Jamaica.* — 16½ M. *Valley Stream* is the junction of the branch to *Far Rockaway* (see p. 80), etc. At *Woodsburgh*, on this branch, is a monument to Culluloo Telawaxana (d. 1818), the last of the Rockaway Indians. — 23 M. *Freeport* (Imperial); 28½ M. *Massapequa* (Massapequa, from $ 2½). — 37 M. Babylon (*Sherman Ho.*, $ 2½; *La Grange*, *Babylon*, $ 2), a small town (2357 inhab. in 1905) and seaside resort. — 41 M. *Bayshore* (Linwood, Shanley, from $ 2), another fashionable resort connected by ferry with *Fire Island* (p. 80); 43 M. *Islip* (Orowoc Hotel, from $ 3); 48 M. *Oakdale*, with the fine estate of Mr. W. K. Vanderbilt. — 54 M. Patchogue (*Cliffton Ho.*, $ 2½-5; *Ocean Avenue Ho.*, $ 2-3; *Roe's Hotel*, from $ 2), with (1905) 3446 inhab., is one of the largest summer resorts on the island. *Blue Point*, the S. extremity of *Patchogue Bay*, lends its name to the well-known oysters. — 58 M. *Bellport* (Wyandotte, $ 3; Mallard, from $ 2) and (66½ M.) *Moriches* (Watchogue, Beach View, $ 2½) are two other favourite resorts. — 70 M. *Eastport;* 74½ M. *Westhampton.* — 85½ M. *Shinnecock Hills* (Shinnecock Inn), with one of the leading golf-clubs in the United States, takes its name from the Shinnecock Indians, a remnant of whom still occupies a reservation close by. — 89½ M. *Southampton*, sometimes called the 'Newport of Long Island', is the summer home of many wealthy New Yorkers. — 95 M. *Bridgehampton* is the junction of a short branch-line to *Sag Harbor* (Nassau Ho., American Ho., $ 2-3), once one of the chief whaling ports in America. — 101 M. Easthampton (*Maidstone Inn*, $ 4; *The Hunting*, $ 3), one of the quaintest villages in the state, is visited annually by many artists, who paint its picturesque windmills. It was the home of *John Howard Payne* (p. 77), and the *Rev. Dr. Lyman Beecher* was pastor here from 1798 to 1810. — The railway ends at (116 M.) *Montauk* (Montauk Inn, $ 3-4), about 7 M. from the bold bluffs of *Montauk Point* (lighthouse), the E. extremity of the island. To the N. is Gardiner's Bay (p. 80), with *Gardiner's* and *Shelter Islands*.

The only other point on Long Island that need be mentioned is *Flushing*, with about 20,000 inhab., which lies 8 M. to the E. of Long Island City (railway and trolley) and contains the residences of many New Yorkers.

4. From New York to Albany.

Comp. Maps, pp. 3, 97, and 232.

a. By Steamer.

150 M. The finely-equipped steamers of the Hudson River Line ('Albany Day Line') leave New York every morning (except Sun.) in summer (ca. May 14th to Oct. 19th) from *Desbrosses St. Pier* at 8.40 a.m., *42nd St.* (N. R.) at 9 a.m., and W. 129th St. at 9.20 a.m., and reach *Albany* about 6.10 p.m., calling at seven intermediate points (fare $ 2, return-fare $ 3½; private cabin $ 5). The largest steamer of this line (the 'Hendrik Hudson') is 400 ft. long and is licensed to carry 5000 passengers. Return-tickets are available for the fine night-boats ('C. W. Morse', 'Adirondack') of the People's Line. Passengers by this line may see the most picturesque part of the Hudson in one day, returning from West Point, Newburgh, or Poughkeepsie by the sister boat, which reaches New York at 5.30 p.m. — The People's Line Steamers leave *Pier 32* (foot of Canal St.) every weekday at 6 p.m., reaching *Albany* at 6 a.m. next day and making no intermediate stops (fare $ 1½, return $ 2½, berth 50 c.). — The Citizen's Line Steamers leave *Pier 46* daily, except Sat., at 5 p.m. and reach *Troy* about 6 a.m., calling at *Albany* on Mon. morning only (fare $ 1½, return $ 2½, berth 50 c.). — The 'Mary Powell' plies every afternoon from the foot of Desbrosses St. and 22nd St. to (95 M.) *Rondout* and *Kingston* (5½ hrs.; fare $ 1, return-fare $ 1½).

Those who wish to see the beauties of the Hudson should, of course, select the 'Day Line'; but the night-boats afford a comfortable and easy mode of travel. An excellent way of seeing the Hudson is to take the 'Mary Powell' to Newburgh (p. 84), spend a day or so here, and go on

by day-boat to Albany. Restaurants on board all the steamers (meals $ 3/4-1; also à la carte). Through railway-tickets to Albany are available on the Day Line steamer, and vice versâ.

The Hudson River rises in the Adirondack Mts., 4000 ft. above the sea (comp. p. 105), and flows into the Atlantic Ocean at New York after a nearly due S. course of 300 M. Its chief tributary is the *Mohawk*, which joins it on the W., a little above Troy. The mountains of the Hudson are part of the Appalachian system, the Highlands (see p. 84) being a continuation of the Blue Ridge. The Hudson has sometimes been called the 'American Rhine', but this title perhaps does injustice to both rivers. 'The spacious and stately characteristics of the Hudson, from the Palisades to the Catskills, are as epical as the loveliness of the Rhine is lyrical. The Hudson implies a continent beyond. For vineyards it has forests. For a belt of water, a majestic stream. For graceful and grain-goldened heights, it has imposing mountains. There is no littleness about the Hudson.... No European river is so lordly in its bearing, none flows in such state to the sea. Of all our rivers that I know, the Hudson, with this grandeur, has the most exquisite episodes. Its morning and evening reaches are like the lakes of a dream' *(G. W. Curtis)*. The E. bank, for many miles above New York, is sprinkled with handsome country-houses. The effect of the tide is perceptible as far as Troy, and the river is navigable for large steamers for 150 M. Sailing-vessels and yachts are abundant in the lower part of its course, while numerous 'tows' of coal-barges, grain-barges, and lumber-rafts are also encountered. Beyond the influence of salt water the Hudson freezes solid in winter, affording an ample harvest to the ice-cutter (comp. p. 85) and a magnificent field for the exciting sport of ice-boat sailing (comp. p. 88). Its name is derived from *Henry Hudson*, a British navigator in the Dutch service, who in 1609 ascended the river in the 'Half-Moon' as far as Albany, in search of a water-passage across the Continent (tercentennial celebrated on Sept. 19-25th, 1909, along with the hundredth anniversary of Fulton's steamer). According to Ruttenber ('Indian Tribes of the Hudson River') the E. bank of the Hudson and part of the W. bank were occupied by the Mohicans, while the W. bank below the Catskills belonged to the Lenni Lenapes (Delawares) and above Cohoes to the Mohawks (Iroquois). The first steamboat that plied regularly for passengers was the 'Clermont' of Robert Fulton (1765-1815; comp. p. 85), which ran between New York and Albany in 1807, taking 36 hrs. for the trip.

In the following description the terms right (R., r.) and left (L., l.) are used with reference to persons ascending the river.

As the steamer starts from its dock, we enjoy a good view of New York Harbour to the S., and as we proceed enjoy an admirable panorama of what Mr. Le Gallienne calls 'New York, with its turreted peninsula, singing like a forest of stone in the breath of the Atlantic'. On the right lies *Manhattan Island*, with the city of *New York*, while to the left, in the *State of New Jersey*, are *Jersey City* (p. 73), *Hoboken* (p. 73), and *Weehawken* (p. 73). Among the most conspicuous points to the right are the huge office-buildings in Broadway and Park Row (pp. 34-38), the Hudson Terminal Buildings (p. 37), the dome of the Pulitzer Building (p. 38), the Flat-iron Building (p. 43), the Metropolitan Life Insurance Building (p. 44), the Dakota Flats (p. 54), St. Luke's Hospital (p. 66), Riverside Park (p. 67), the Soldiers and Sailors Monument (p. 68), General Grant's Tomb (p. 68), Columbia University (p. 66), and the College of the City of New York (p. 69). To the left are Stevens Castle (p. 73), *Union Hill Observatory*, *St. Michael's Observatory*, the West Shore Railroad Station (p. 10), the Guttenberg Brewery (p. 73), and *Pleasant Valley*. Near the end of Manhattan Island, 10-11 M. from the Battery,

we pass between *Fort Lee* (p. 73), on the left, and the site of *Fort Washington* (p. 69) on the right. At Fort Lee begin the *Palisades, an extraordinary ridge of columnar basaltic rocks, not unlike the Giant's Causeway, rising almost vertically to a height of 200-500 ft. and extending along the W. bank of the Hudson for about 15 M. The width of the mountains of which they form the E. escarpment is $^1/_2$-$1^1/_2$ M., and the W. slope is quite gentle. The beauty of the Palisades has been somewhat marred by quarrying and blasting operations. — To the right (13 M.) is *Spuyten Duyvil Creek* (p. 86).

$16^1/_2$ M. (r.) *Mt. St. Vincent Convent*, the buildings of which include *Fonthill*, formerly the home of Edwin Forrest, the actor. It is the American headquarters of the Sisters of Charity.

17 M. (r.) **Yonkers** (p. 86), with the old *Phillipse Manor House.*

21 M. (r.) *Hastings* (p. 86). Opposite is Indian Head (*View), the highest point of the Palisades. About $^1/_2$ M. farther on (l.) is the boundary between New Jersey and New York, both banks henceforth belonging to the latter. — 23 M. (r.) *Dobb's Ferry* (p. 86).

24 M. (r.) *Irvington* (p. 86). *Sunnyside*, Irving's house, $^3/_4$ M. above, can scarcely be distinguished from the steamer. Opposite (l.) lies *Piermont*, with the long pier of the Erie Railroad. About 2 M. to the S.W. of Piermont is the old village of *Tappan*, where André was executed (Oct. 2nd, 1780). — The Palisades here lose their wall-like character, and the Hudson expands into the lake-like expanse of the **Tappan Zee**, 10 M. long and 3-4 M. wide.

25 M. (r.) *Lyndehurst* (p. 86), the residence of the late Jay Gould (d. 1892), loftily situated, with a tall tower.

27 M. (r.) *Tarrytown* (p. 87), whence a steam-ferry plies across the Tappan Zee to (3 M.) **Nyack** (*Tappan Zee Ho.*, $3-5; *St. George Hotel*, with restaurant, near the landing, $2-3), a brisk little village, the terminus of the Northern Railroad of New Jersey.

30-32 M. (l.) *South Hook Mt.* (730 ft.) and *North Hook Mt.* (610 ft.). *Rockland* lies just beyond the latter.

32 M. (r.) *Ossining* (p. 87), with the low white-marble prison at the water's edge.

33 M. (r.) Estuary of *Croton River* and *Croton Point* (p. 87). Here, off *Teller's Point*, the extremity of the peninsula, the 'Vulture' anchored when she brought André to visit Arnold (p. 84).

The steamer now enters **Haverstraw Bay**, which is 4 M. wide.

37 M. (l.) **Haverstraw** (p. 87), at the N. base of *High Tor* (820 ft.). The Highlands (p. 84) are visible in the distance.

40 M. (l.) *Stony Point*, at the N. end of Haverstraw Bay, now marked by a lighthouse, was the site of a fort taken by the British on June 1st, 1779, and re-captured at the point of the bayonet by Gen. Wayne (p. 188) six weeks later. The river here is only $^1/_2$ M. wide, and on the E. bank is *Verplanck's Point*, the site of *Fort Lafayette.* — 41 M. (l.) *Tompkin's Cove*, with lime-stone quarries. — 43 M. (l.) *Kidd's Point* or *Caldwell's Landing;* r. *Peekskill.*

The river makes an abrupt bend to the left here, and the Dutch mariner Jan Peek is said to have followed the *Peek's Kill* (r.) under the idea that it was the Hudson, until his ship ran aground. Above Caldwell's Landing rises the *Dunderberg* (p. 89), and to the N. of Peekskill is *Manito Mt.*, with the camp of the *New York State National Guard.* — We here pass through the S. gate of the **Highlands**, the beautiful hill-girt section of the river extending from this point to near Newburgh (see below).

46 M. (r.) **Anthony's Nose** (900 ft.), deriving its name, according to Diedrich Knickerbocker's humorous account, from the 'refulgent nose' of the Dutch trumpeter, Anthony van Corlear. Nearly opposite are *Iona Island* (with a large store of naval ammunition), *Bear Hill* (1350 ft.), and the sites of *Forts Clinton* and *Montgomery.*

50 M. (r.) *Sugar-Loaf Mt.* (765 ft.), near the S. base of which lay the *Beverly Robinson House*, Arnold's headquarters, where he received the news of André's capture and whence he made his escape to the 'Vulture'. Opposite are the *Buttermilk Falls*, 100 ft. high (insignificant except after heavy rain), on the bluff above which is *Lady Cliff*, a large and finely situated school for girls.

52 M. (l.) **West Point** (p. 89), the site of the well-known *Military Academy*, various buildings of which are visible. To the N. is the *West Point Hotel* (p. 89), and above the 'Post' rises *Fort Putnam* (p. 90). Steam-ferry to *Garrison* (p. 87).

Passing West Point, we turn sharply to the left. The Battle Monument (p. 89) is now conspicuous. To the right, on the point known as *Constitution Island*, was long the home of *Miss Warner* (1819-85; buried in West Point Cemetery), author of the 'Wide, Wide World'.

54½ M. (l.) *Crow Nest* (1405 ft.), immortalized in *J. R. Drake's* 'Culprit Fay'. — r. *Cold Spring* (p. 87), at the foot of *Mt. Taurus* or *Bull Hill* (1425 ft.).

56 M. (l.) ***Storm King** or *Butter Mt.* (1530 ft.), with *Cornwall* (p. 90) at its N. base. — r. *Breakneck Mt.* (1635 ft.). Between these hills is the *North Gate of the Highlands*, beyond which we pass the little *Polopel's Island* (r.). The mountains trend to the N.E.

59 M. (l.) *New Windsor.* — r. *Dutchess Junction* (p. 87).

61 M. (l.) **Newburgh** (see p. 90). *Washington's Headquarters* (see p. 90), a one-storied stone building, with a timber roof, surrounded by trees and distinguished by a flag-staff, are seen just below the town. On the opposite bank lies *Fishkill* (comp. p. 87).

67 M. (l.) *Duyvil's Dans Kamer*, a low flat rock on a promontory.

70 M. (l.) *Marlborough*, with fine Arbor Vitæ trees.

75 M. (r.) **Poughkeepsie** (see p. 87). The boats of the Day Line meet here, and passengers who wish to return to New York make direct connection. *Vassar College* (p. 88) is not visible. — l. *New Paltz Landing* (comp. p. 90).

The ***Poughkeepsie Railway Bridge**, which here spans the

Hudson, constructed on the cantilever principle in 1886-89, is 2260 yds. long ($1^1/_4$ M.) and 200 ft. above high-water.

77 M. (r.) *Hudson River State Hospital for the Insane.* Numerous handsome residences are passed on the right, and large ice-houses on the left. It is estimated that the ice-industry of the Hudson represents a capital of $6,000,000 (1,200,000*l.*) and gives employment in winter to 15,000 men. Many of the estates on both banks are still in the hands of the original 'Knickerbocker' families.

82 M. (r.) *Hyde Park* (p. 88). Just above is the residence of *F. W. Vanderbilt*, almost opposite which (l.) is the home of *John Burroughs*, the author.

87 M. (r.) *Dinsmore Point*, with the house of the late *Wm. B. Dinsmore*, long president of the *Adams Express Co.*, which began in 1840 with two men, a boy, and a wheelbarrow, and now has 18,400 men and 4150 waggons and carries parcels over 34,000 M. of railway.

91 M. (l.) **Kingston** and **Rondout** (see p. 90). Opposite lies *Rhinecliff Landing* (p. 88; ferry 13 c.).

99 M. (r.) *North Bay* (above *Cruger's Island*), where Fulton built the 'Clermont' (p. 82), with the aid of Chancellor Livingston, a member of the influential New York family of that name. The *Livingston Manor House* is a large house in the Colonial style, on a knoll to the right.

100 M. (r.) *Tivoli*, whence a ferry runs to —

102 M. (l.) *Saugerties* (p. 91), with a lighthouse.

The **Catskill Mts.** (R. 7) now bound the view on the left. *Overlook Mt.* (p. 101), with its hotel, rises nearly opposite Tivoli, and next to it is *Plattekill* (3135 ft.), above Saugerties.

103 M. (r.) *Clermont*, the original seat of the Livingston family, descended from the Earls of Linlithgow (comp. above); it is a small house, almost hidden by the foliage. Nearly opposite is *Malden*, above which rises *Kaaterskill Mt.*, with the *Kaaterskill Hotel* and the *Catskill Mt. House* (p. 99).

108 M. (r.) *Germantown Station.* Just beyond this point we have the best view, to the left, of the supine figure of the '*Man in the Mountain*', whose knee, breast, and face (from S. to N.) are formed by different peaks of the Catskills. *Round Top* (p. 100), rises to the N. of the man's head.

115 M. (l.) *Catskill* (p. 98), at the mouth of the *Catskill Creek.* This was the highest point reached by the 'Half-Moon' (p. 82), but Hudson sent small boats up as far as *Waterford* (p. 127), 4 M. above Troy. Numerous large *Ice Houses* to the left.

120 M. (r.) **Hudson** (p. 88). Steam-ferry to *Athens* (l.). The scenery is now less attractive. — 127 M. (l.) *Coxsackie* (ferry). — 125 M. (r.) *Stuyvesant.* Numerous flat islands are passed. — 136 M. (r.) *Schodack.* — l. *Coeymans* (pron. *Queemans*), behind which rise the *Helderberg Mts.* (p. 96). — 141 M. (r.) *Castleton.* Extensive dykes have been made from this point onwards to improve the channel.

148 M. (r.) *Van Rensselaer Place* or *Fort Cralo* (1642), an old

brick house, with a modern Mansard roof and a flag-staff, was the place where Richard Schuckburg, a surgeon of the British army, wrote 'Yankee Doodle' in 1757. It is now preserved as a national memorial.

150 M. (l.) **Albany** (see p. 91), with the *Capitol* towering above the other buildings, is connected by three bridges with *Rensselaer* (p. 85).

156 M. (r.) **Troy**, see p. 128.

b. Viâ Railway on the East Bank.

143 M. New York Central and Hudson River Railroad in 2¾-4½ hrs. (fare $3.10; parlor-car $1). This line affords good views of the W. bank of the Hudson (seen to the left).

New York, see p. 10. The train leaves the Grand Central Station, traverses the Park Avenue tunnel (p. 51), passes *125th Street Station*, and crosses the *Harlem River* by a huge four-track swing-bridge of steel (1896). To the left are Grant's Tomb (p. 68), St. Luke's Hospital (p. 66), and Columbia University (p. 66). The line turns to the W. (left) beyond (5 M.) *138th Street*, and skirts the Harlem to *High Bridge* (p. 70) and (11 M.) *Spuyten Duyvil*, on *Spuyten Duyvil Creek* (p. 30), so named, says the legend, from the Dutch trumpeter *Anthony van Corlear*, who 'swore most valorously that he would swim across it in spite of the Devil (en spuyt den duyvil)', but 'sank for ever to the bottom' (see *W. Irving's* 'Knickerbocker History of New York'). The creek formed the S. boundary of the 'Neutral Ground' in the Revolutionary War. — Spuyten Duyvil lies on the E. bank of the *Hudson*, which we now follow closely, obtaining good views of the *Palisades* (p. 83), on the opposite side. — 14 M. *Mount St. Vincent* (p. 83). — 15 M. **Yonkers** (*Arlington*, *Bardin's*, *Getty Ho.*, *Wynnstay*, from $2, R. from $1), a thriving town, with (1905) 61,716 inhab. and the residences of many New Yorkers. It occupies the land of the Phillipse estate (comp. p. 83), and the manor-house (1682), in front of which is a Soldiers' Monument, is now the city-hall. — 19½ M. *Hastings-on-Hudson* (International). — 21 M. *Dobb's Ferry* (Bellevue), a picturesque suburban village, affording fine views of the N. end of the Palisades. In the old Livingston Mansion here, in 1783, Washington, Carleton, and Clinton met for the final settlement of the terms on which England recognized American independence. — 22 M. *Ardsley-on-Hudson*, with its golf club (see p. 24). — 23 M. *Irvington*, on the *Tappan Zee* (p. 83), with 'Sunnyside', the home of W. Irving (p. 87), the E. end of which is covered with ivy, grown from a slip given to Irving at Abbotsford by Sir Walter Scott†. The house has lately been enlarged. The *Paulding Manor* (*Lyndehurst*; see p. 83) is a fine old building. *Nevis* is a stately mansion built in 1836 by a son of Alex. Hamilton and

† According to another version of the story, the ivy was brought from Melrose Abbey.

named in honour of his father's birthplace. Near the station are the huge premises of the *Cosmopolitan Printing & Publishing Co.* — 25 M. **Tarrytown** (*Florence*, $ 2-3; *Bella Vista*, in summer, $ 3-5), on a hill rising from the river, was the scene of Major André's capture in 1780 (monument) and is the centre of a district rich in reminiscences of the Revolutionary War. It is, perhaps, still better known from its connection with *Washington Irving* (comp. p. 33), who was churchwarden of *Christchurch* here (restored in 1897) and is buried in the graveyard of the old *Dutch Church*, 3/4 M. to the N., built in 1699 with bricks brought from Holland. The latter church lies in '*Sleepy Hollow*', which is traversed by the *Pocantico* or *Mill Brook*, with the bridge across which 'Ichabod Crane' rushed helter-skelter from the pursuit of the 'Headless Horseman'. *Carl Schurz* (1829-1906) is buried in Sleepy Hollow Cemetery. Among the most beautiful estates near Tarrytown is *Rockwood Hall*, the seat of Mr. Wm. Rockefeller. Opposite Tarrytown lies Nyack (p. 83).

31 M. **Ossining** (*Weskora*, $ 2-3), formerly *Sing Sing*, a prettily situated town with (1905) 7135 inhab., is the seat of the large *State Prison*, which is seen to the left. The *Croton Aqueduct* (p. 70) here crosses a ravine by a stone arch, 70 ft. high and 88 ft. in span. — The train then crosses the mouth of the *Croton River* (6 M. up which is the *Croton Reservoir*, p. 70) and intersects *Croton Point*. Across the Hudson, which is here at its widest (*Haverstraw Bay*, 4 M.), is the village of *Haverstraw* (p. 83). Farther on the train is frequently carried across creeks and bays on low trestle-work. — 41 M. **Peekskill** (*Raleigh*, *Eagle*, $ 2-3), a pretty little town with (1905) 13,200 inhab., on *Peek's Kill*, opposite the *Dunderberg* (p. 89; ferry to *Caldwell's Landing*). Excursions may be made to *Lake Mohegan* (summer-hotels; electric cars), *Oscola Lake*, and *Lake Oscawana*. — The train penetrates *Anthony's Nose* (p. 84) by a tunnel 70 yds. long, passes (46 M.) *Highlands Station* (view of the hills across the Hudson), and reaches (50 M.) *Garrison* (Highland Ho., loftily situated, $ 2 1/2-3), opposite *West Point* (p. 89; ferry 15 c.). 53 M. *Cold Spring* (ferry to *Cornwall* p. 90); 55 M. *Storm King*, opposite the hill of that name (p. 84). — 57 M. *Dutchess Junction*.

The Newburgh, Dutchess, & Connecticut R. R. runs hence to (58 M.) *Millerton* (p. 74), passing (29 M.) *Millbrook* (900 ft.; Halcyon, Millbrook Inn, from $ 3), a favourite summer-resort.

59 M. *Fishkill Landing* lies at the mouth of the *Matteawan Creek*, opposite *Newburgh* (p. 90; ferry 9 c.).

A wire-rope railway ascends hence to the top of *South Beacon Hill* 1585 ft.), which affords a *View of the Hudson and the Catskills (p. 97).

74 M. **Poughkeepsie** (200 ft. above the river; *Nelson Ho.*, $ 3-3 1/2; *Morgan Ho.*, $ 2-3; *Rail. Restaurant*), a city of (1905) 25,379 inhab., was settled by the Dutch in 1698 and contains some handsome buildings, including a large *State Insane Asylum*. The name (pron. *Pokipsy*) is a corruption of the Indian *Apo-keep-sinck* ('safe harbour'). The *Eastman Park* is pleasantly laid out.

About 2 M. to the E. lies **Vassar College** (1000 students and 95 teachers), the first and perhaps the best-known of the American colleges for women, founded in 1861 by Matthew Vassar, an Englishman, at a cost of upwards of $ 500,000. The present value of endowments and property is nearly $ 3,000,000. The campus includes 400 acres, and there are over a score of separate buildings. The most noteworthy are the Thompson Library (60,000 vols.), the chapel, the lecture hall, the science buildings, and the old main building, 500 ft. long. — *Cantilever Bridge*, see p. 84. — Poughkeepsie is the headquarters of iceboat sailing (comp. p. 82).

79 M. *Hyde Park;* 84 M. *Staatsburg.* The river-banks are now much less precipitous. — 89 M. *Rhinecliff*, terminus of the Central New England R. R. About 2 M. to the E. lies *Rhinebeck* (Rhinecliff Hotel, from $ 2), round which about 25 sq. M. of ground are devoted to the growing of violets. A steam-ferry plies hence to *Kingston* (p. 90). The *Beekman House*, near Rhinecliff, is a good specimen of a Dutch house of the 17th century. — From (99 M.) *Tivoli* a ferry plies to *Saugerties* (p. 85). The Catskills (p. 97) are now prominent on the other side of the Hudson. From (110 M.) *Greendale* or *Catskill Station* a steam-ferry runs to the town of *Catskill* (p. 98), the chief avenue of approach to the *Catskill Mts.* (R. 7).

115 M. **Hudson** (*Worth Ho.*, $ 2½; *Central*, *St. Charles*, *Lincoln*, $ 2), a small city with (1905) 10,290 inhab., on the slope of *Prospect Hill* (200 ft.), carries on an active river-trade (ferry to *Athens*, p. 85). The Albany & Hudson R.R. runs hence through a pleasant country to (18 M.) *Niverville* (p. 334). — 142 M. *Rensselaer* (p. 85). Our train here crosses the Hudson, while trains for Troy and other points to the N. (comp. R. 11 b) continue on the E. bank.

143 M. **Albany** *(Rail. Restaurant)*, see p. 91.

c. Via Railway on the West Bank.

142 M. West Shore Railroad in 4½-6½ hrs. (fare $ 3.10; sleeper $ 1.50, parlor-car $ 1). This line affords better views than that on the E. bank, but starts from *Weehawken* (p. 73; ferry from Desbrosses St. ½ hr., from 42nd St. ¼ hr.).

The train starts at *Weehawken* (see p. 73; Rail. Restaurant) and passes through a long tunnel into the valley of the *Hackensack*, which runs through marshes to the left. As far as Nyack our line runs parallel with the *Northern New Jersey Railroad* (to the right). All view of the Hudson is at first cut off by the *Palisades* (p. 83).

11 M. *West Englewood;* 20 M. *Tappan* (p. 83); 25 M. *West Nyack*, 1½ M. to the W. of *Nyack* (p. 83). At (27 M.) *Valley Cottage* the *South Hook Mt.* (p. 83) rises to the right. 29½ M. *Conger's* is the station for *Rockland Lake* (150 ft.), 1 M. to the S.E., an important source of New York's ice-supply. The train now threads a tunnel and emerges on *Haverstraw Bay* (p. 83; *View of the *Hudson*). To the left is *High Tor* (p. 83). 33 M. *Haverstraw* (Rockland Ho., $ 2), with extensive brick-fields. The line now hugs the

river. From (40 M.) *Jones Point* a spiral railway (views) ascends to the top of the *Dunderberg* (865 ft.; pleasure grounds). 42 M. *Iona Island* (p. 84); 44 M. *Fort Montgomery* (p. 84).

48½ M. **West Point** (*West Point Hotel*, $ 3½), the seat of the well-known *Military Academy* for training officers for the U. S. army, is finely situated on the W. bank of the Hudson, overlooking the Highlands (p. 84). The railway-station is on the level of the river, but the parade-ground and the principal buildings of the 'Post' occupy a plateau about 160 ft. above.

West Point was first fortified in 1778, and this 'Gibraltar of the Hudson' was an important point in the Revolutionary War, though no actual fighting took place here. Arnold was commander of the post at the time of his treason. Washington recommended the site for a military academy, but it was not till 1802 that it was established.

The *West Point Military Academy usually contains about 500 cadets, nominated, between the ages of 17 and 22, by Members of Congress and appointed by the President. The course of instruction (4 years) is very thorough. The instructors are officers of the army. The cadets go into camp in July and Aug., but the most interesting drills are held in April, May, Sept., and Oct.; dress-parades are held all the year round.

Visitors will find an introduction convenient, but can see most of the points of interest without one.

[Congress has recently appropriated ca. $ 7,500,000 for improvements and additions to West Point Academy; and a very extensive scheme of reconstruction is now in progress from the plans of Messrs. Cram, Goodhue, and Ferguson (architects) and Olmsted Brothers (landscape architects). The style employed for all the buildings is English Perpendicular Gothic, adapted to modern conditions. The older structures of historic value have been preserved and incorporated in the new scheme. The following account is at places a little in advance of accomplished fact.]

Opposite the landing is the new *Railway Station*, with an *Elevator* ascending to the new *Hotel* on the hill above. We ascend to the right, by a good road along the face of the cliffs, and soon reach (right) the *Power House* and *Riding Hall* (visitors admitted to the galleries). The horsemanship of the senior cadets is wonderfully good, and no one should neglect an opportunity to see their exercises. On the higher ground immediately to the W. of the Riding Hall is the *Headquarters Building*, with its massive tower. The last is adjoined by the *East Academic Building* and the *Library*, the latter containing a memorial, by Aug. Saint-Gaudens, to *J. McNeill Whistler* (p. 313) and *E. A. Poe*, who were both cadets at West Point for a short time.

We now reach the fine *Parade Ground* (40 acres in area), where all the military exercises take place. We turn to the left, passing the *West Academic Building* and the *South Cadet Barracks*. [Behind, to the S. of the former, is the *Grant* or *Mess Hall*, with portraits of Grant, Sherman, Sheridan, and other officers.] In the S.W. corner of the Parade Ground is a statue of *Col. Thayer*, and on its W. side are additional *Cadet Barracks* and the *Gymnasium* (some way back). In the N.W. corner is a group of *Ordnance* and *Store Buildings*. On the N. side, near the flag-staff, is the tall *Battle Monument* (78 feet high), erected in 1894 and consisting of a column surmounted by a Victory by MacMonnies. Close by, on the site of the old hotel, will stand the *Staff Headquarters*. To the N.E., in an angle of *Fort Clinton*, is a monument to *Kosciuszko*. On the E. side of the Parade Ground is the *Cullum Memorial Hall*, with the *Officers' Mess* to the S. of it, while in front is a monument to *Dade's Command* (p. 629).

The so-called 'Flirtation Walk', on the river-side, leads to *Kosciuszko's Garden*, a spot frequented by that heroic Pole. The *Officers' Quarters* extend along the main road on the plateau, to the N. and S. of the Academic Buildings and the Cadet Barracks. Beyond these are the *Cemetery* and the

Soldiers' Village. — To the S. of the Gymnasium (p. 89) are the large new *Chapel*, in a commanding situation, and the *Observatory.* — In the S. part of the Post (reached by turning to the left at the new railway station) are the *New Officers' Quarters*, the *Quarters of the Married Soldiers*, and the *Cavalry* and *Artillery Barracks.*

The views from different parts of the Post are beautiful, but the visitor with a little time to spare should ascend to (15-20 min.) the ruins of Old Fort Putnam (596 ft.). Here we can walk round the ramparts, obtaining a magnificent *View in all directions: up and down the Hudson, nearly the whole of the Highlands, Newburgh, the buildings of the Post (at our feet), the red-domed observatory on a lower hill to the S., etc. — A fine road (*Views) leads from West Point to (7 M.) *Cornwall* (see below) over the slopes of *Crow Nest* (p. 84) and *Storm King* (p. 84), and the energetic visitor may easily ascend one or both of these mountains (*Views).

Leaving West Point, the train tunnels under the Parade Ground and skirts the bases of *Crow Nest* (p. 84) and *Storm King* (p. 84), commanding fine views of the mountains on the other side of the Hudson. 53 M. *Cornwall* (Elmer Ho., $2\frac{1}{2}$-3), a popular summer resort, with *Idlewild*, for 15 years the home of *N. P. Willis* (1807-67).

58 M. **Newburgh** (**Palatine*, $ 3-4; *U. S. Hotel*, $ 2-3), a city and coaling port of (1905) 26,498 inhab., finely situated on the W. bank of the Hudson, 130-300 ft. above the water. The chief point of interest here is the old *Hasbrouck Mansion*, to the S. of the city, which was Washington's headquarters in 1782-83 and dates in part from 1750 (interesting relics; adm. free; catalogue 25 c.). It was here that Washington was offered the title of king by the officers of the army. In the N.E. corner of the grounds is the so-called *Tower of Victory*, with a statue of Washington (view).

Newburgh is the junction of a branch of the *Erie Railway*, running into Pennsylvania.

The line continues to follow the Hudson closely. — 73 M. *Highland* is the station for the steam-ferry to *Poughkeepsie* (p. 87).

89 M. **Kingston** *(Eagle*, $ 2-$2\frac{1}{2}$; *Rail. Restaurant)* and **Rondout** (*Mansion Ho.*, $ 2-$2\frac{1}{2}$; 'ronduit' = fort, redoubt), the one on the heights a little back from the river and the other at the mouth of the *Rondout Creek*, have been united in one city with (1905) 25,556 inhab., cement works, and a trade in coal. The *Senate House* of Kingston, built in 1676 and the first home of the N. Y. State Legislature, contains an interesting collection of Dutch and other relics. Kingston was burned by the British in 1777.

Kingston is the junction for the *Ulster & Delaware R. R.*, one of the approaches to the Catskill Mts. (see R. 7c), and connects by steam-ferry with *Rhinecliff* (p. 88). — Rondout is the termination of the Delaware and Hudson Canal, which was constructed in 1825-28 to tap the Pennsylvania coal-fields and runs to (108 M.) *Honesdale.*

From Kingston to Campbell Hall, 38 M., *Wallkill Valley R. R.* in $1\frac{1}{3}$-2 hrs This line is of importance to the tourist mainly as giving access to *Lakes Mohonk* and *Minnewaska* (p. 91). The station for both of these is (15 M.) *New Paltz* (Jackson Ho., $ 2), which may also be reached from New York viâ the N.Y., Ontario, & Western R. R. and the Erie R. R. (through-fare to Lake Mohonk about $ $3\frac{1}{4}$, to Minnewaska about $ $3\frac{1}{2}$) and by trolley-line from Highland, opposite Poughkeepsie (p. 87). Stages run in connection with the trains from New Paltz to (6 M.) *Lake Mohonk* (fare $ 1.25, when not included in the railway ticket; trunk 50 c.)

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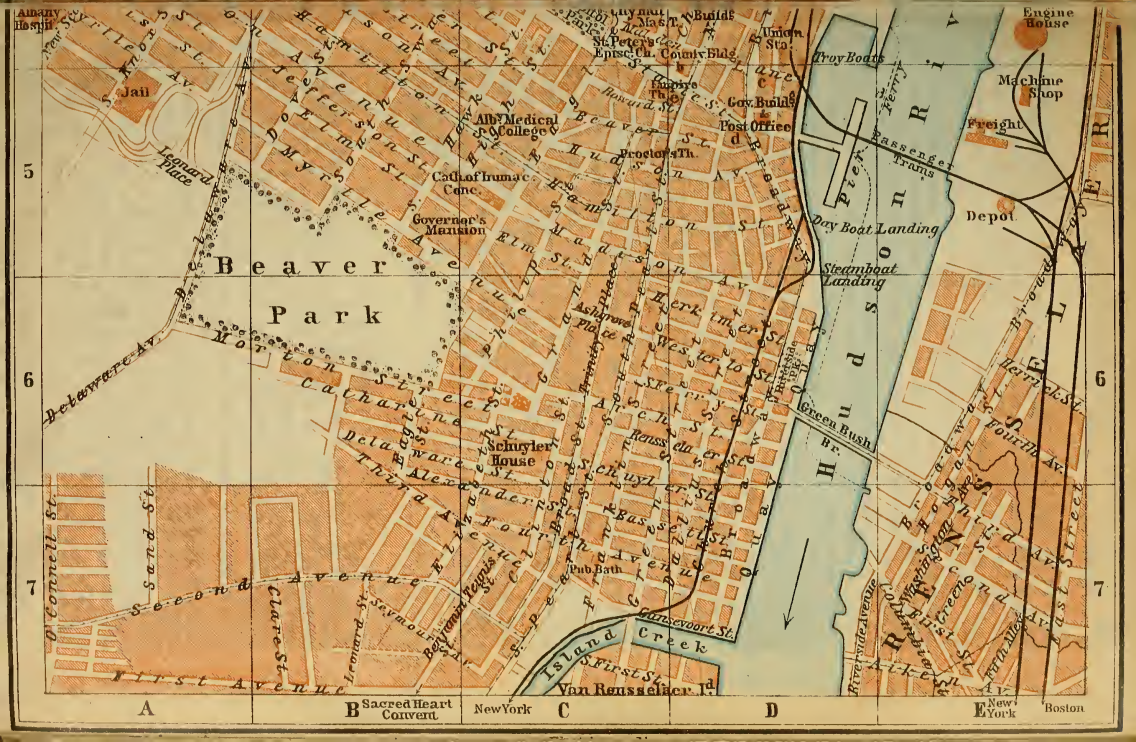
B
C
D
E
1
2
3
Watervliet
Troy
North Albany
Albany St.
N. Pearl St.
Loudonville Plankroad
Broadway
Bridge St.
Mill St.
Tivoli Lakes
Tivoli Reservoir
Northern Boulevard
Patroon Creek
Dudley Park
Buffalo
Erie Canal
Lumber District
Bath Ferry
Bath
Freight Trains
Ontario St.
Livingston Av.
Third St.
Second Street
First Street
Judson St.
Quail St.
Clinton Avenue
Elk St.
Sherman St.
Central Avenue
Bradford St.
Speedway
S. Normal Coll.
Western Av.
Washington Park
Park Lake
Boulevard
Van Woert St.
Colonie St.
Swan St.
Ten Broeck Pl.
Ten Broeck St.
St. Joseph's Church
St. Peter's Hospital
Lawrence
Colonie St.
Spencer St.
Quackenbush
Pearl St.
Orange St.
State Armory
Harmanus Bleecker Hall
Histor. & Art Soc.
All Saints Cathedr.
Child's Hosp.
Albany



Albany Hospit.
Jail
Leonard Place
Beaver Park
Delaware Av.
Morton Street
Catharine St.
Delaware St.
Third Avenue
Alexander St.
Fourth Avenue
Second Avenue
First Avenue
Clare St.
Sand St.
O'Connell St.
Leonard St.
Seymour St.
Benjamin Tennis St.
Elizabeth St.
Eagle St.
Hamilton St.
Hawk St.
Jefferson St.
Elm St.
Myrtle Avenue
Dove St.
Hamilton St.
Hudson Av.
Beaver St.
Hudson Av.
Hamilton St.
Madison Av.
Elm St.
Grand St.
Philip St.
Ashgrove Place
Trinity Place
Herkimer St.
Westerlo St.
S. Ferry St.
Arch St.
Renssela er St.
Schuyler St.
Bassett St.
Dallius St.
Broad St.
Franklin St.
Pearl St.
Clinton St.
Broadway
Quay
Pub. Bath
Gansevoort St.
Island Creek
S. First St.
Van Rensselaer Id.
Sacred Heart Convent
New York
Boston
Union Sta.
Troy Boats
Empire Th.
Gov. Buildg.
Post Office
Proctor's Th.
Alby Medical College
Cath. of Immac. Conc.
Governor's Mansion
St. Peter's Episc. Ch.
County Bldg.
Pier
Passenger Trains
Day Boat Landing
Steamboat Landing
Green Bush Br.
Riverside Avenue
Columbia St.
Washington Ave.
Greene St.
First St.
Fifth Alley
Aiken Av.
Broadway
Hogan St.
Herrick St.
Fourth Av.
Third Av.
Second Av.
East Street
Engine House
Machine Shop
Freight
Depot
Hudson River
Ferry
Broadway
Riverside Pk.
5
6
7
A
B
C
D
E

and from *Kerhonkson*, on the N. Y., Ontario, and Western R. R., to (6 M.) *Minnewaska* (1½ hr.). — *Lake Mohonk (1245 ft.) is a charming little sheet of water, situated near the summit of *Sky Top* (1550 ft.), one of the *Shawangunk Mts.* (p. 142), 6 M. to the W. of New Paltz. Fine views are enjoyed in all directions over a scene in which the wild and the gentle are mingled in picturesque variety. On the margin of the lake stands the **Mohonk House*, a huge hotel with accommodation for 450 guests (from $ 3 or $ 4 a day, $ 18-42 a week, acc. to season). The mounains are traversed by fine walks and drives, and fishing, bathing, and golf (links near the Mountain Rest Ho., see below) are also among the attractions. — About 6 M. to the S. of Lake Mohonk and 10 M. to the S.W. of New Paltz, at an elevation of 1800 ft., is *Lake Minnewaska*, on the banks of which are two similar hotels, the *Wildmere* and the *Cliff* ($ 2½-4 a day, $ 12-25 a week). All three hotels are managed on 'a strictly temperance plan'. Moreover 'visitors are not expected to arrive or depart on the Sabbath'. Automobiles are not admitted to the grounds, and the life generally is much quieter than at most large American summer-hotels. The Mohonk House opens about June 1st and closes about Oct. 20th; the Minnewaska season begins in mid-June and closes about the end of September. — On the crest of the mountains above Lake Mohonk, overlooking the valleys of the *Rondout* and the Wallkill, is the *Mountain Rest*, a boarding-house for 80 guests ($ 2½-3 a day, $ 12-20 a week). — The 'Mohonk Conferences', held every spring and autumn, discuss International Arbitration and the means of improving the condition of the American Indian.

A charming excursion for drivers, cyclists, or automobilists is from Kingston to Lake Mohonk, thence to *Port Jervis* (p. 143), and thence by the old coach-route down the valley of the Delaware to the *Delaware Water Gap* (p. 140). Comp. p. 143.

The train now runs at some little distance from the river. 100 M. *Saugerties*, at the mouth of the *Esopus Creek* (rail. stat., 1 M. from the river), near the *Plattekill Clove* (p. 102).

111 M. *Catskill*, the junction of the *Catskill Mt. Railway* and another portal to the *Catskill Mts.*, see p. 98. 115½ M. *West Athens;* 121 M. *Coxsackie.* At (129 M.) *Ravena* the line for Buffalo and the West diverges to the left.

142 M. *Albany*, see below.

5. Albany.

Hotels. Ten Eyck (Pl. b; D, 4, 5), at the N.E. corner of State and Chapel Sts., R. from $ 2; *Hampton (Pl. d; D, 5), 38 State St., R. with bath from $ 2; New Kenmore (Pl. a; D, 4), N. Pearl St., R. from $ 1½; Stanwix Hall (Pl. c; D, 5), Broadway, near the railway-station, from $ 2½ R. from $ 1; Globe (Pl. e; D, 5), State St., from $ 2. — A list of *Boarding Houses* is kept at the Chamber of Commerce (95 State St.), where also information to strangers is freely given.

Restaurants at the *Hampton, *Ten Eyck*, *New Kenmore*, and other hotels; *Keeler's*, State St.; *Railway Restaurant*.

Tramways (electric; fare 5 c.; transfers issued) run through the main streets and to *Watervliet* (p. 95), *Cohoes* (p. 127), *Troy* (p. 128), *West Albany*, and *Rensselaer*. — **Electric Railways** run from Albany to *Lake George* (p. 122), *Hudson* (35 M.; p. 88), *Schenectady* (p. 129), *Saratoga* (p. 119), etc.

Steamers ply to *New York* (see R. 4a), *Newburgh* (p. 90), *New Baltimore*, and *Troy* (p. 128), and **Steam Ferry Boats** run to *Rensselaer* (p. 85) and *Bath*.

Cabs. For each pers., 1 M. 50 c., 2 M. 75 c., 3 M. $ 1.

Theatres. *Harmanus Bleecker Hall* (Pl. B, 3), see p. 95; *Proctor's Theatre* (Pl. C, 5), S. Pearl St.; *Empire* (Pl. C, 5), State St., above S. Pearl St. (burlesques).

Post Office (Pl. D, 5), Broadway, corner of State St.

Albany, the capital of the State of New York, is a thriving commercial city with (1905) 98,374 inhab., finely situated on terraced hills rising from the W. bank of the *Hudson*, at its junction with the Erie and Champlain Canals. It is well built on the whole, with many handsome buildings, and retains much of the clean, comfortable, and easy-going character of its original Dutch foundation. Brewing and stove-making are its chief industries, and it has a large lumber market. Albany is united with the E. bank of the Hudson by a road-bridge and two railway-bridges (comp. p. 86).

Albany was founded by the Dutch in 1609, and was thus, next to Jamestown in Virginia (p. 561), the oldest European settlement in the Thirteen Original States. A stockade was erected here in 1624 and named *Fort Orange*, but in 1664, when the place passed into the hands of the British, it was re-christened Albany in honour of the future James II. The small town long carried on a lucrative fur-trade with the Indians, but did not contain more than 5000 inhab. at the beginning of the 19th century. It received a city charter in 1686 and became the State capital in 1797.

In 1629 the 'Patroon' system of Holland was established on the Hudson. The first Patroon was *Killian van Rensselaer*, of Amsterdam, a director of the Dutch West India Co., who, along with others, received from the States General a grant of land extending along the Hudson for 24 M. from the Mohawk River to Beeren Island, below Albany, and running inland for 24 M. from each bank. The Patroon was practically a feudal lord, with the absolute title to the soil, and his tenants were little more than serfs. The property was created a manor in 1685, and soon after the Van Rensselaer heir bought out the other co-proprietors. The manor was not entailed, but its descent was regulated by the law of primogeniture. The patroonship was inherited through five generations but became obsolete after the Declaration of Independence. The last Patroon, *Gen. Stephen van Rensselaer*, died in 1839. After the Revolution the obligation of paying rent to the Patroon produced the so-called 'Anti-Rent War', which convulsed the State of New York and caused the troops to be called out several times. The rights of the Van Rensselaers were sustained by all the State Courts. *Col. Church* purchased the rights of the Van Rensselaers in 1853, and most of the tenants have acquired the fee-simple of their lands.

Albany has long been an important political centre. In 1754 a provincial congress that met here formed a plan of union that made possible the concerted action of the Colonies a little later; and in more recent times the little knot of Albany politicians has practically determined the nomination and election of several Presidents of the United States. The 'Albany Regency' was the name given by Thurlow Weed to a powerful junta of Democratic politicians here in 1824-37, including Martin van Buren.

Bret Harte (d. 1902) was born at Albany in 1839.

The Erie Canal, which connects Lake Erie at Buffalo with the Hudson at Albany, was constructed in 1817-25 at an original cost of $7,500,000 (1,500,000*l.*), since increased to at least $100,000,000 (20,000,000*l.*), including maintenance, enlargement, feeders, and connections (Champlain Canal, etc.). It is a monument of the foresight of *Gov. De Witt Clinton* (p. 78), who pushed on the work in spite of all opposition, and gave New York its start as the commercial metropolis of America. The canal is 360 M. long, 7 ft. deep, 56 ft. wide at the bottom, and 70 ft. wide at the surface. It descends 570 ft. by means of 72 locks. It is chiefly used for the conveyance of grain, salt, and timber; and the annual amount of goods carried over it is 3,000 000 tons, valued at $300,000,000 (60,000,000*l.*). The canal is now being reconstructed, at an immense cost, so as to allow of the passage of barges with a capacity of 1000 tons. The route of this new canal will differ considerably from that of the old one. It will be 75 ft. wide at the bottom and 123 ft. at the top, and it will have 38 locks, each 300 ft. long.

The large *Union Railway Station* (Pl. D, 4) abuts on *Broadway*,

the chief commercial thoroughfare, running nearly parallel with the Hudson. A little to the S., at the corner of State St., stands the *Post Office* (Pl. D, 5), opposite which is the *Albany Trust Co.*

State Street, 150 ft. wide, ascends directly from the river to the (1/4 M.) Capitol (see below), crossing *Pearl St.* (N. and S.), which runs parallel with Broadway and contains the best shops. To the right, adjoining the Albany Trust Co. (see above), is the *First National Bank*, in white granite. On the same side, at the corner of James St., is the *Mechanics' and Farmers' Bank*, with an inscription stating that it occupiest he site of the house of *Anneke Janse Bogardus* (1663), whose heirs made such valiant and long-continued efforts to recover from Trinity Church (p. 36) the old family property in New York. Also on the right, just below N. Pearl St., is the *New York State National Bank*, bearing an inscription to the effect that it is the oldest bank-building continuously used as such in the United States (since 1803).

The chief buildings in N. Pearl Street (Pl. D, 4) are the *Albany Savings Bank* (on the site of the Vanderheyden Place, mentioned in Washington Irving's 'Bracebridge Hall'), the *Young Men's Christian Association*, and the *New Kenmore Hotel* (W. side; p. 91).

S. Pearl St. ends at (2 1/4 M.) *Norman's Kill.* — Schuyler St., 3/4 M. from State St., runs to the right from S. Pearl St. to the interesting old **Schuyler House* (Pl. C, 6), now a R. C. orphan asylum, built for Gen. Philip Schuyler in 1760-61. Alex. Hamilton was here married to Elizabeth Schuyler in 1780, and a dent in the old staircase is said to have been made by the tomahawk of one of a party of Indians who tried to carry off Gen. Schuyler in 1781. Gen. Burgoyne was entertained here with his staff after his capture at Saratoga. Washington, Franklin, Carroll of Carrollton, etc., were also guests of this house, and Pres. Millard Fillmore was married here.

A little farther up State St., to the right, is the *Ten Eyck Hotel* (p. 91); to the left are the *Empire Theatre* (p. 91) and the *Albany City Savings Institution.* At the corner of Lodge St. stands **St. Peter's Episcopal Church* (Pl. C, 4), with a fine Gothic tower, some good stained-glass windows (one by Burne Jones), a reredos by Louis Saint-Gaudens, and a mosaic pavement.

The **Capitol** (Pl. C, 4), commandingly situated at the top of State St. hill, with a small park in front of it, is a huge structure in the French Renaissance style, built (1867-98) in the form of a quadrangle, 300 ft. wide and 400 ft. deep, with louvre-towers at the angles. The central court is 137 ft. long and 92 ft. wide; above the dormer windows are the arms of the Stuyvesant, Schuyler, Livingston, Jay, Clinton, and Tompkins families. The building covers an area of three acres (comp. p. 161). It is built of a light-coloured granite, which contrasts pleasantly with the red-tiled roofs. Its total cost is estimated at at least $ 25,000,000. The original design was by *Thomas Fuller*, but this has been considerably modified in construction. 'If anyone had come up to me and told me in French, old or new, that the new Capitol was "le château de Monseigneur le duc d'Albanie", I could almost have believed him' *(E. A. Freeman).*

The *Eastern Approach* is the principal one. It extends out from the building for 166 ft., provides for an entrance to the groundfloor through an arcade and to the first floor through a broad portico reached by 77 steps, and gives dignity to the chief façade of the building.

Interior (guidebooks and photographs for sale at stall inside N. entrance; guides obtainable on application at the Superintendent's Office).

The Ground Floor, which is occupied by offices and administrative departments, is connected with the upper floors by elevators and by three handsome staircases. The *Assembly Staircase*, in the N.E. corner, built of freestone, is fine but ill-lighted and somewhat gloomy. The **Senate Staircase*, in the S.E. part of the building, is of warm red sandstone, with round and pointed arches and much fine tracery and decoration. The **Western Staircase*, in the centre of the W. side, is of light-red sandstone, with treads of reddish-brown freestone. It consists of a double stairway, ascending to the top of the dome (119 ft.), and is profusely adorned with carvings of historic scenes, foliage, and historic and symbolic heads, all shown off to great advantage by the colour and texture of the stone. It is crowned by a frieze of medallions containing the heads of the Governors of the State from 1777 to 1896. At the head of the staircase is an interesting collection of Indian relics.

The First Floor also is mainly occupied by offices. In the spacious foyer leading from the main entrance is the *Bureau of Military Statistics* (open 9-5), with a collection of State flags used in the Civil War, photographs, memorials of Lincoln, American antiquities, and other relics. In the S.E. corner is the *Governor's Room* or *Executive Chamber*, with mahogany wainscoting and ceiling and hangings of Spanish leather. The elaborate coloured marble decorations of the *S. Corridors* are very effective.

Second Floor. The Assembly Chamber (in the centre of the N. side), 140 ft. long and 84 ft. wide (including the galleries), was originally covered by a large groined arch (56 ft. high), supported by four massive columns of marble. The N. and S. walls were decorated with two monumental frescoes by *William M. Hunt*, but these are now concealed by a wooden ceiling, while the arched roof, having proved unstable, has been removed. Visitors admitted to the galleries when the house is in session. — The *Court of Appeals*, at the E. end of the S. side, is a fine room (53 ft. long and 35 ft. wide), adorned with red oak, marble, and Mexican onyx. Next to it is the *Senate Chamber, the elaborate design of which is due to *Mr. H. H. Richardson* (p. lxxxix). It is 100 ft. long, 60 ft. wide, and 50 ft. high (including lobbies and galleries). Among the chief decorative features are the oaken ceiling, the panelling of Mexican onyx and Tennessee marble, the gilded frieze, the open fireplaces, the chandeliers, and the stained-glass windows. The galleries are supported by arches of yellow Siena marble, borne by dark-red granite columns. 'When I say that the arches in the Senate Chamber seemed to me, as far as their general conception goes, worthy to stand at Ragusa, some will understand that I can say no more' (*Freeman*). — The *Lieut. Governor's Room* is entered from the W. lobby of the Senate Chamber.

Third Floor. Entrance to the *Galleries* of both the Senate (S.) and Assembly (N.) is gained from this floor. The rest of the floor is devoted to administrative offices and committee rooms. A good view of the great W. staircase (see above) is obtained at the W. end of the building.

To the N.E. of the Capitol Park, at the corner of Eagle St. and Maiden Lane, is the *City Hall (Pl. C. 4), by *H. H. Richardson* (1881-83), in a free S. French Gothic style, with a fine tower. Just to the N. of it is the *State Hall*, containing the offices of the State Comptroller, State Engineer, and State Superintendent of Banks. Opposite are the *Academy Park* and the *Albany Academy* (for boys), where J. Henry first demonstrated the theory of the magnetic tele-

graph by ringing a bell by electricity transmitted through a mile of wire strung round the room (1831).

By following *Eagle Street* towards the S. we reach the *Albany Medical College* (good museum) and, at the corner of Madison Ave., the R. C. Cathedral of the Immaculate Conception (Pl. C, 5), a large Gothic building, with spires 210 ft. high. The elaborate interior is lighted by numerous stained-glass windows. A little farther on, below Elm St., is the *Governor's Mansion.* — To the S.W. of this point lies **Beaver Park** (Pl. A, B, 5, 6).

To the W. of the Capitol State St. is continued, past the *Albany Law School* (Pl. B, 4), to (½ M.) ***Washington Park** (Pl. A, B, 3, 4), which is beautifully laid out (views of Catskills and Helderbergs). It contains a small lake, a bronze statue of Robert Burns, and a fountain with a figure of Moses (by J. Massey Rhind). — To the S.W. of Washington Park are the *Bender Laboratory*, the *Albany Hospital* (Pl. A, 4), the *Alms Houses*, and the **Dudley Observatory** (beyond Pl. A, 4), a well-equipped institution, which has done good astronomical work (adm. on previous written application to the Director).

In Washington Avenue (Pl. B, C, 3, 4; street-cars) is the handsome *Harmanus Bleecker Hall*, transformed into a theatre in 1898. Adjoining, at the corner of Lark St., is the *State Armoury* (Pl. B, 3). One block to the E. is the new building of the *Albany Historical and Art Society* (Pl. B, C, 4), with its museum.

A little to the E., occupying the whole block bounded by Washington Ave., Swan, Lafayette, and Hawk Sts., with a wing extending back to Elk St., is the new **State Education Building** (Pl. C, 4), designed by Messrs. Palmer & Hornbostel and to be completed in 1910 at a cost of $ 3,500,000.

This building will contain the valuable *State Library* (over 500,000 vols.), the *State Museum of Natural History*, the *Library School*, and the offices of the *State Department of Education.*

In S. Swan St., just to the N. of the Education Building, is the Episcopal ***Cathedral of All Saints** (Pl. C, 4), begun in 1883 and the first regularly organized Protestant cathedral erected in the United States.

The choir, with its large E. window, has been finished, but the rest of the building lacks the courses above the triforium (at present replaced by a temporary roof), and the towers also have still to be added. Its style is English Gothic. The architect is *Mr. R. W. Gibson.* The six nave windows commemorate six of the oldest Dutch families in Albany. The choir-stalls are from Bruges (1623).

We may go on from here by electric car (5 c.) to (20 min.) the *Rural Cemetery* and (½ hr.) *Watervliet* (p. 91). Visitors to the *Rural Cemetery have ½ M. to walk (to the left) after leaving the car, when they reach the tasteful lodge of the cemetery to the right and the gate of the *St. Agnes R. C. Cemetery* to the left. The chief lion of the Rural Cemetery is the figure of the **Angel at the Sepulchre*, by E. D. Palmer (1817-1904), to reach which we turn to the left at the lodge and follow, as nearly as possible, the railing of the St. Agnes Cemetery, until we reach the top of the *S. Ridge* (*Views). Close by is the tomb of *Gen. Schuyler* (p. 93) and a little to the N. is that of *President Arthur* (1830-86).

The *Filtration Plant* of Albany is of great interest to engineers and is frequently visited by experts. The filter-beds lie about halfway between the railway-station and the Rural Cemetery (beyond Pl. E, 1).

Among points of interest within easy reach of Albany, besides the Hudson River places of R. 4, are *Saratoga* (p. 119), the *Catskills* (p. 9), the *Adirondacks* (p. 104), *Sharon Springs*, *Cooperstown* (see below), and *Lake George* (p. 122). *Shakers*, 6 M. to the N.W., was the original Shaker settlement in America (1774) and is the burial-place of Mother Ann Lee (d. 1784).

6. From Albany to Binghamton.

143 M. Delaware and Hudson Railroad *(Susquehanna Division)* in 4¼-5 hrs. (fare $ 4.25; parlor-car 75 c.).

The line ascends towards the W. At (11 M.) *Voorheesville* (p. 139) we cross the West Shore R. R. To the left are the *Helderberg Mts.*, whence the Helderberg limestone formations are named. Near (14 M.) *Meadowdale* is the fine cliff known as the 'Indian Ladder'. — 17 M. *Altamont* (Helderberg Inn, from $ 2½), with many country-houses, is the best headquarters for exploring the Helderberg Mts. — At (27 M.) *Delanson* (800 ft.), where the line from Mechanicville and Saratoga joins ours, we see to the left the singular trestle-work of the *Dodge Coal Storage Apparatus*. — From (36 M.) *Schoharie Junction* a branch-line runs to (4 M.) *Schoharie* and (10 M.) *Middleburgh*.

45 M. *Cobleskill* (900 ft.; Augustan, $ 2) is the junction of a branch-line to (14 M.) *Sharon Springs* and (23 M.) *Cherry Valley*.

Sharon Springs (*Pavilion*, $ 4; *Sharon House*, $ 2½-3; *Union Ho.*, from $ 3; *Manhattan*, $ 2½; *Howland Ho.*, $ 2), finely situated in a little wooded valley, 1200 ft. above the sea, has frequented sulphur and chalybeate springs, chiefly used for bathing. Just below the *Baths* the stream forms a pretty waterfall, 60 ft. high. The piazza at the back of the Pavilion Hotel commands an extensive *View over the *Mohawk Valley* (p. 130), with the Adirondacks in the background. The view from **Prospect Hill*, 3½ M. to the N.W., on the road to Cherry Valley, is still finer.

23 M. Cherry Valley (1320 ft.), another little summer-resort, with hotels and boarding-houses. In 1778 the inhabitants were all massacred or taken prisoner by the Tories and Indians. A pleasant drive may be taken to (14 M.) *Richfield Springs* (p. 131; stage).

50 M. *Richmondville;* 67 M. *Schenevus*. A little farther on we cross the watershed between the Mohawk and the Susquehanna. — 76 M. *Colliers*, for a short line to (16 M.) *Cooperstown*.

Cooperstown (1240 ft.; *Otsego Hall*, $ 2½-3½; *Fenimore Ho.*, $ 2-3; *Park Hotel*, from $ 2; large new hotel building on the lake-front), a village of (1905) 2446 inhab., prettily situated at the lower (S.) end of Otsego Lake, was founded in 1786 by *Wm. Cooper*, father of *J. Fenimore Cooper* (1789-1851), the novelist, who lived and died here and immortalized the district in his romances. *Otsego Lake (the 'Glimmerglass' of Cooper), 9 M. long and ¾-1½ M. wide, is one of the prettiest of the New York lakes. The *Susquehanna* issues from it at the foot of River St., near *Council Rock* and the site of the dam erected by Gov. Clinton during the Revolution.

To reach the site of the old *Cooper Mansion*, where the novelist lived from 1834 to his death in 1851, we descend Main St. and turn to the right at Fair St. (first cross-street beyond the Park Hotel). It is marked by a statue of an Indian Hunter, and its grounds have been converted into a public park. The building opposite the main entrance contains a library and a collection of relics referring to Cooper and Cooperstown. Cooper is buried in the graveyard of Christ Church (1819; in which he worshipped), reached by turning to the left beyond the site of the house.

A small steamer plies regularly on Otsego Lake (round trip 35 c.). The drive or walk round the lake (ca. 20 M.) is pleasant. Crossing the Susque-

Wagner & Debes Geog.l Estab.t Leipzig

0 1 2 3 4 5 6 7

0 1 2 3 4 5 6 7 8 9 10

hanna at the foot of Main St., we reach (5 min. cross-roads, where walkers may ascend the steps to the right through wood. In 13 min. we cross a road and, keeping to the left, reach (3-4 min.) the summer-house on *Prospect Rock* (1440 ft.), commanding a splendid *View of Cooperstown and the lake. Returning to (3-4 min.) the road we crossed, we descend it to (10 min.) the above-mentioned fork. We then continue our route along the lake, the tree-shaded road recalling that along the W. bank of Windermere. 7 min. *Cemetery*, containing a monument to Cooper. About 2-3 min. farther on a path descends to the left to the *Fairy Spring*. About 1/2 M. beyond the cemetery is a rough path (right) ascending to (10 min.) *Natty Bumpo's Cave* (view). *Point Judith*, with Kingfisher's Tower, is 1 M. farther on.

In following the W. shore of the lake we pass many of the places mentioned in *Cooper's* 'Deerslayer'. 1/2 M. *Hannah's Hill* and *Musk Rat Cove;* 2 1/2 M. *Leatherstocking Falls;* 3 M. *Three Mile* or *Wild Rose Point*, where Hetty Hutter landed. Adjacent is *Mohican Glen*. From *Five-Mile Point* a road ascends to the top of *Mt. Otsego* (2800 ft.; view-tower), commanding an extensive *View. 6 M. *Hutter's Point*, near which take place the final scenes of the story. A white buoy in the lake marks the site of 'Hutter's Castle', on a sunken island. The *Steamboat Landing* is 1 M. farther on.

An electric tramway runs from Cooperstown to (15 M.) *Richfield Springs* (p. 131), and numerous other walks and drives may be made. It is 13 M. from *Cherry Valley* and 20 M. from *Sharon Springs* (p. 96).

82 M. *Oneonta* (1085 ft.), with railway-workshops and a trade in hops; 99 M. *Unadilla* (The Ontio, $ 2 1/2-3; Hotel Bishop, $ 2), a pleasant summer-resort; 119 M. *Nineveh*, the junction of a branch to *Wilkes-Barré* (p. 183). — 133 M. *Sanitaria Springs* (1110 ft.), with sulpho-phosphate and other mineral springs, has a large *Hydropathic Establishment* ($ 1 1/2-3 per day, from $ 7 a week).

143 M. **Binghamton** (865 ft.), see p. 141.

7. The Catskill Mountains.

The chief gateways to the Catskill Mts. are *Kingston* (p. 90) and *Catskill* (p. 98), both situated on the W. bank of the Hudson and both reached from New York by *Steamer* (R. 4a; fares $ 1, $ 1 1/2), by *West Shore Railroad* (R. 4c; $ 1.76, $ 2.18), or by *N. Y. C. & H. R. Railroad* (R. 4b) and ferry ($ 1.76, $ 2.33). Through-tickets are issued on these routes to the chief resorts in the mountains, the fares varying from $ 2.18 to $ 4.70. The Mts. may be approached from the N.W. via *Oneonta* and *Stamford* (p. 104).

The *Catskills, the Indian *Onti Ora* or '*Mts. of the Sky*', are an outlying group of the great Appalachian system, running parallel with the Hudson for about 12-15 M., at a distance of 8-9 M. from its W. bank. They lie mainly in Greene Co., New York, and cover an area of about 500 sq. M. Their name is of Dutch origin and is generally referred to the wild-cats that infested them, though this explanation is doubtful (kill = stream, gorge). Towards the E. their declivity is very abrupt, and as seen from the Hudson they appear like an almost vertical wall 2000-3000 ft. high. On the other sides the slopes are more gradual. Deep ravines, known as 'Cloves' (South African Dutch *Kloof*), are cut into many of the mountains by mountain-torrents. The highest summits are *Slide Mt.* (4205 ft.; p. 103) and *Hunter Mt.* (4025 ft.; p. 102). An additional attraction of the Catskills is the part they play in the scant legendary lore of America (comp. p. 98). Their picturesque scenery, cool and healthy atmosphere, and easy accessibility have made them a favourite summer-resort; and numerous good hotels and boarding-houses (mostly open June-Sept.) now sprinkle the entire district. The most frequented of these are the *Kaaterskill Hotel* and the *Catskill Mountain House* (see pp. 100, 99). A glimpse at the chief points of interest may be obtained in a day by a round trip from Catskill

to either of the just-mentioned hotels and thence viâ *Stony Clove* and the *Kaaterskill Railroad* to *Tannersville*, *Phoenicia*, and *Kingston* (or in the reverse direction); but a stay of 1-3 weeks is desirable for a closer acquaintance with the mountains. The Catskill railways generally cease running in winter. Fair trout-fishing is obtained in the mountain-streams. The reddish, greenish, and bluish sandstone to which the name Catskill has been attached belongs to the latest Devonian formations of America.

a. From Catskill to the Catskill Mountain House and the Hotel Kaaterskill.

Catskill (95 ft.; *Grant House*, 1 M. to the W., with view, $4; *Smith Ho.*, $2-3), a village with (1905) 5294 inhab. and a Franciscan college, is finely situated on the W. bank of the Hudson, at the mouth of the *Catskill Creek*. There are numerous pleasant walks and drives in the vicinity, and boating and fishing may be enjoyed on the two rivers. It is a station of the Hudson steamers (p. 85) and the West Shore R. R. (p. 91).

Catskill is the starting-point of the narrow-gauge Catskill Mountain Railroad, which runs hence to (13 M.) *Cairo* (35-45 min.) and to (16 M.) *Palenville* (¾ hr.). The railway ascends the Catskill Creek, passing through *Austin's Glen* and showing the remarkable upheavals of the strata, to (8 M.) *South Cairo* and (10 M.) *Cairo Junction*, where the Cairo branch (3 M.) diverges to the right.

Cairo (345 ft.; *Columbian*, $2-3; *Winter Clove Ho.*, $2; *Glen Falls Ho.*, 4 M. from station, $2) is an unpretending little summer-resort, commanding a good view of the Catskills.

Beyond Cairo Junction the train skirts the base of *Cairo Round Top Mt.* 11½ M. *Lawrenceville.* — 13½ M. *Mountain House Station*, where the road to the (4¼ M.) *Catskill Mt. House* (p. 99) begins.

The *Road from the Mountain House Station to the Mountain House (4¼ M.) ascends very rapidly, and good walkers can accomplish the distance almost as fast as a carriage. After passing through (½ M.) the toll-gate at the foot of the mountain, we turn to the left and ascend to *Sleepy Hollow*, the scene of Rip van Winkle's famous adventure, and to (1 M.) the *Rip van Winkle House* (1275 ft.). A slab of rock is pointed out as the actual spot of his twenty years' slumber! Farther on the road toils up the 'Dead Ox Hill', rounds 'Cape Horn', passes the 'Short Level', again turns abruptly to the left, climbs 'Featherbed Hill', traverses the 'Long Level', passes the top of the Otis Elevating Railway (see below), and leads to the W. or rear entrance of the *Catskill Mt. Ho.* (p. 99).

15 M. *Otis Junction*, the starting-point of the Otis Elevating Railway, which leads directly to *Otis Summit* in 10 min., ascending 1600 ft. in 1⅓ M. (fare 75 c.). The top of this railway is connected with the *Catskill Mt. House* (p. 99) by a covered walk. It reduces the time of the journey from Catskill to the Mountain Ho. to 50 min. (from New York 3½-4 hrs.).

Otis Summit is also the station for the (1 M.) *Hotel Kaaterskill* (p. 100).

From Otis Summit to Tannersville, 5¼ M., *Catskill & Tannersville Railway* in ⅓ hr. — This line, which practically duplicates the Kaaterskill branch of the Ulster & Delaware R. R. (see p. 102), has stations at the (2 M.) *Laurel House*, (3¼ M.) *The Antlers* (p. 103), *Haines' Corners* (3½ M.; for *Twilight*, *Sunset*, and *Santa Cruz Parks*; see p. 103), and (4¾ M.) *Clum Road.* — 5¼ M. *Tannersville*, see p. 102.

16 M. **Palenville** (*Stony Brook Ho.*, $ 2-3; *Pine Grove Ho.*, $ 2½; *Palenville Ho.*, 1 M. from the station, $ 2), finely situated at the entrance to the Kaaterskill Clove (see below), lies 3 M. from the Kaaterskill Hotel. Palenville is much frequented by artists, and many pleasant walks and drives may be made from it. Coaches run hence to *Haines' Falls* and *Tannersville* (p. 102; $ 1).

The **Kaaterskill Clove** is a narrow wooded ravine, like the 'Notches' of the White Mts. (pp. 325, 329), enclosed by *South Mountain* (see below) on the right and *High Peak* (p. 100) and *Round Top* (p. 100) on the left. A rough road ascends through the Clove, crossing the creek 1 M. from the station. ⅓ M. *Artist's Grotto* and *La Belle Falls*. A little farther on are two landslips. At (1 M.) *Profile Rock* we cross the creek (profile seen by looking back from the bridge). ¼ M. *Fawn's Leap;* ¼ M. *Buttermilk Falls;* ¼ M. Bridge over *Lake Creek*. Here we may either turn to the right and follow the lateral ravine to (1 M.) the *Kaaterskill Falls* or take the path up the Clove proper to (1¼ M.) *Haines' Falls* (p. 103). The road ascends to (1¼ M.) the *Haines' Falls House* (p. 103).

The *Road from Palenville to the Hotel Kaaterskill (3 M.; see above; coach-fare $ 1½, trunk 50 c.) runs from the station to the W. through the village, then turns to the right, and ascends along the N. side of the Kaaterskill Clove (see above). In 1½ M. we cross the so-called *Gulf*, with the *Point of Rocks* and *Indian Head* high above us to the right, and about ½ M. farther on we bend back on our course and proceed for some distance to the E., climbing towards (½ M.) the head of the Gulf, several hundred feet above the point where we crossed it below. To the left diverges the *Ledge Drive* (p. 100). In ½ M. more we reach the hotel (p. 100).

The Catskill Mountain House (2250 ft.; $ 4 per day, $ 17½-25 per week, acc. to room and season; 400 beds) is magnificently situated on the ridge of *South* or *Pine Orchard Mountain* (2500 ft.). The **View from the rocky ledges in front of the hotel is of a unique beauty and interest (shown by search-light, 9-11 p.m.). Golf-links have been laid out near the hotel.

The E. escarpment of the mountain rises so abruptly from the plain, that the effect is almost as if we were leaning out of the car of a balloon or over the battlements of a castle 2000 ft. high. The plain between the mountains and the Hudson, 10 M. off, is spread out at our feet like a low-relief map, with chessboard squares of fields, patches of woodland, villages, and farm-houses. Catskill is distinctly seen due E., and Athens (p. 86) and Hudson (p. 88) may be made out a little more to the N. The moving trains on the banks of the Hudson are curiously distinct and minute. The E. background is formed by the blue Berkshire Hills (p. 337), over which the shadowy White Mts. (p. 310) are sometimes visible.

Walks. By following the road leading towards North Mt. and North Lake and taking the first path to the right, we soon reach (10 min.) the *Artist's Rock*, on the E. ledge of N. Mt. (view), beyond which the path ascends some steps and reaches (3 min.) *Prospect Rock*, which commands a very extensive *View. The ledge-path next leads to (5 min.) *Sunset Rock*, beyond which it bends to the left to (7 min.) *Jacob's Ladder* and the *Bear's Den* (*View). The ledge-path ends at *Newman's Ledge* (view of Sleepy Hollow, p. 98), 10-12 min. beyond the Bear's Den. — The path to the *left* at the fork, 5 min. beyond the Bear's Den, ascends towards the crest of North Mountain (33 0 ft.), a walk round which takes in all 4-5 hrs. The path crosses the '*Burnt District*' to (20 min. from Bear's Den) the cavity called the *Cellar*. Here we bend towards the left and walk round the crest to (½ hr.) the so-called **First Outlook*, at the top of the mountain, and (10 min.) the *Second Outlook*. The trail descending from this point through the trees is sometimes a little difficult to follow; but there is little danger of being lost if the general direction of the hotel be taken

at the Outlook and followed by compass. An additional help in case of doubt is the water-pipe leading to the hotel (1½-2 hrs.). It is not advisable to try this walk alone. — By following the path to the left at the entrance to the North Mt. walk, passing the E. end of North Lake, and ascending along the stream, we reach (½ hr.) *Mary's Glen*, with small waterfalls. We may return by crossing the stream above the falls and following a path leading S.W. to (¼ hr.) the main road, which we reach at the *Charcoal Pit*, ⅓ M. from the hotel.

The Catskill Mt. House is about 1 M. to the N.E. of the Kaaterskill Hotel (see below), and the excursions made from the latter (see below) can all be made from the former also.

The *Hotel Kaaterskill (2495 ft.; $ 4-5 per day, $ 21-25 per week; 1200 beds), the most fashionable resort in the Catskills, is situated on one of the highest points of *South Mt.* (p. 99) and commands a view little, if at all, inferior to that from the Mountain House (see p. 99). Immediately to the S.W. rise *High Peak* (p. 101) and *Round Top* (3470 ft.), thickly clad with timber from top to bottom, and due W. is *Hunter Mt.* (p. 102). *Kaaterskill Station* (p. 103) lies about ¾ M. to the N.W., at the end of South Lake (p. 103).

Walks. Most of the paths, roads, and points of interest are clearly indicated by sign-posts and arrows painted on the rocks.

1. To the *Catskill Mt. House*, 1-1¼ M. Different paths, indicated by sign-posts, begin in front (E.) and to the N. of the hotel, and lead viâ the *Fairy Spring*, the *Mossy Path*, the *Druid Rocks*, the *Lemon Squeezer*, and the *Ledge Path*. The last skirts the E. edge of the mountain, affording fine views of the Hudson Valley, the best from the so-called (½ M.) *Grand View*. A short digression may be made to the left to the top of *South Mountain* (p. 99; *View). — A pleasant round may be made by going viâ the Ledge Path and returning viâ the Druid Rocks, making a complete circuit of South Mt.

2. *Palenville Overlook*, 1¾ M. The path leads to the S.E. from the hotel. The *Overlook (1660 ft.) commands a fine view of Kaaterskill Clove (p. 99).

3. *Inspiration Point and Sunset Rock*, 1 M. A path beginning at the hotel-stables (to the S.W. of the hotel) leads through low wood, crossing a road, to (⅓ M.) a point on the Ledge Drive, where stands a sign-post indicating the path to (¼ M.) *Inspiration Point* (*View), overlooking Kaaterskill Clove. Thence we follow the path along the brink of the Clove to (¼ M.) *Sunset Rock (2120 ft.), which commands a magnificent view of the Clove and of the tree-clad mass of High Peak (see above). — We may continue this walk to *Kaaterskill Falls* (see below), either by the paths on the level of the rock or by descending the ladder-steps to the bottom of the Clove. The easiest route to follow is the path to the extreme right ('To Hotel Kaaterskill'), which ascends to (5 min.) the *Ledge Drive*. We follow this road to the left, and in about 1 min., turning twice to the left, reach the *Laurel House* and the *Falls* (see below).

4. *Laurel House and Kaaterskill Falls*, 1 M. We may either follow the road leading to the S.W. from the front of the Hotel and joining, (¾ M.) the Ledge Drive (see above), or we take a path leading W. from the Annex to (4 min.) an old 'logging road', which leads to the left and joins the Ledge Drive near the Laurel House. — The Laurel House (2065 ft.; $ 2½-4 per day, $ 15-25 per week) is situated at the head of the Kaaterskill Falls, 300 yds. from the railway-station mentioned at p. 98. — The *Kaaterskill Falls in an imposing rocky amphitheatre, reached by a flight of steps behind the hotel (adm. 25 c.), are 260 ft. in height, in two leaps of 180 ft. and 80 ft. In dry weather the water is dammed up at the head of the falls and turned on for visitors like the Lichtenhain Waterfall in the Saxon Switzerland. A little lower down are the *Bastion Falls* (40 ft.). — A good view of the Falls is obtained from *Prospect Rock*, on the S. side of the Clove, reached by a path (½ M.) from the Laurel House.

5. To *Haines' Falls*, 2½-3½ M. The most direct route is by a forest path from Prospect Rock (p. 100), which comes out on (1 M.) *Featherbed Lane* (see below), about ½ M. from the Falls. This route is a little difficult to find unaided, but the following is quite distinct. To the *Laurel House*, as above, 1 M. Hence we follow the road to the W., crossing both railways. On reaching the (½ M.) main road we follow it to the left for 1¼ M. We then descend to the left by *Featherbed Lane* (also crossing the railways) to the (½ M.) bottom of the Clove, turn to the right, and reach the (¼ M.) *Haines' Falls House* (p. 103), where a placard indicates the way to the *Falls* (p. 103).

Other short walks may be made to (½ M.) the *Boulder* and to the points mentioned in connection with the Mountain House at p. 99.

The ascent of *North Mt.* (p. 99) takes about 1 hr. — That of **High Peak** (3660 ft.) takes 1½-2½ hrs. from the Haines' Falls House (p. 103) and is rather toilsome, but the view is very fine.

Longer Excursions, by railway or carriage, may be made to *Tannersville* and *Onteora Park* (p. 102; 5-8 M.), *Stony Clove* (p. 102), *Catskill* (p. 98), *Sleepy Hollow* (p. 98), *Overlook Mt.* (see below), *Plattekill Clove* (p. 102), etc.

b. From Kingston (Rondout) to the Hotel Kaaterskill.

48 M. Ulster and Delaware Railroad in 2½ hrs. (fare $ 1.35). This line skirts the S. and W. sides of the Catskills. Through-carriages run by this route from New York and Philadelphia to Tannersville, Haines' Corners, the Laurel House, the Hotel Kaaterskill, and many other points. The Day Line steamers connect directly with the railway at *Kingston Point*.

The regular terminus of the railway is at *Rondout* (p. 90), but the track has been extended to *Kingston Point*, the steamboat landing 2 M. to the E. After leaving Rondout the train stops at (3 M. from Kingston Point) the Union Station in *Kingston* (p. 90). The line ascends gradually through the beautiful valley of the *Esopus*. 9 M. *Stony Hollow* (410 ft.). — 10 M. *West Hurley* (530 ft.) is the starting-point of the road (coach $ 1.25) to (9 M.) the top of **Overlook Mt.** (3150 ft.), near which stands the *Overlook Mt. House* ($ 3; 2980 ft.; 300 beds), a favourite resort, the *View from which, embracing the Hudson, the Highlands (p. 84), and the Catskills, is considered by some authorities the finest in the district. *Mead's Mountain House* ($ 2), about halfway up the mountain (7 M. from the railway; stage $ 1), is well spoken of. Quarters may also be obtained at Aaron Riseley's farm, at *Woodstock*, 4 M. from West Hurley station. — Beyond (16 M.) *Brown's Station*, to the left, may be seen some of the preliminary work for the main dams of the *Ashokan Reservoir* (see p. 70).

The largest of these dams is to be 220 ft. high and 4800 ft. long. Taken together the dams will aggregate 20,000 ft. in length and will convert part of the fair valley of the Esopus into a lake 12 M. long and ¾-4 M. wide (about twelve times as large in area as the Lake Vyrnwy reservoir for Liverpool; see *Baedeker's Great Britain*). The water will be conveyed hence to New York (86 M.) by a concrete aqueduct 17 ft. high and 17½ ft. wide, and will pass under the Hudson at Storm King (p. 87) by a huge syphon-tunnel. The daily supply to the city will amount to at least 500 million gallons. The estimated cost of the whole undertaking is $ 162,000,000.

Near (20 M.) *Shokan* (535 ft.) *High Point Mt.* (3100 ft.) is conspicuous to the left. The train now turns to the N., disclosing, to

the left, a fine semicircle of mountains, sending off radiating spurs to a common centre (the two most to the right are *Mt. Wittenberg*, 3802 ft., and *Mt. Cornell*, 3906 ft.). Near (22 M.) *Boiceville* we twice cross the Esopus. — Beyond (26 M.) *Mt. Pleasant* (700 ft.) the valley contracts; to the left rises *Panther Mt.* (3760 ft.). *Indian Head* (see below) and other high mountains are seen to the right.

28 M. **Phœnicia** (800 ft.; *Tremper House*, with fine view, $ 3-4), the junction of the Stony Clove Railroad (see below), is pleasantly situated and a good centre for excursions (to the top of *Mt. Wittenberg*, *Stony Clove*, *Woodland Valley*, *Big Indian Valley*, etc.). — We now leave the main line and ascend by the Stony Clove branch (views to the left) through ***Stony Clove**, a beautiful wooded ravine between *Mt. Sheridan* (2207 ft.) and *Hunter Mt.* (4025 ft.) on the left and *Mt. Tremper* (2740 ft.) and *Stony Mt.* (3855 ft.) on the right. — 30 M. *Chichester*, with a chair factory; 33 M. *Lanesville*, with a fine view (left) of the *Diamond Notch*, *Hunter Mt.*, and *Big West Kill Mt.* (3925 ft.; to the W.). To the left are deep ravines between the spurs of Hunter Mt. Soon after passing (36 M.) *Edgewood* (1785 ft.), we reach the top of the pass (2070 ft.) and begin to descend. — 40 M. *Kaaterskill Junction* (1700 ft.), whence the *Kaaterskill Division* diverges to the right (through-cars).

The Hunter branch of the railway goes on to (43 M.) **Hunter** (1645 ft.; *West End*, $ 2½; *Prospect Ho.*, $ 2; *Hunter Ho.*, $ 2-3), close to the base of the *Colonel's Chair* (3165 ft.) and 2 M. to the N. of *Hunter Mt.* (see above), both of which summits may be ascended hence. Fine drives may be taken to the *Overlook Mt. Ho.* (14 M.) and the *Hotel Kaaterskill* (11 M.); and nearer points of interest are *Mossy Brook* (1 M.), *Onteora Park* (see below), and *Stony Clove*.

The Kaaterskill Railroad ascends towards the E. — 43 M. **Tannersville** (1860 ft.; *Hotel Martin*, $ 2-2½, open all the year; *Blythewood*, $ 2½) occupies one of the most conveniently central situations in the Catskills.

Clum Hill (2300 ft.), ¾ M. to the S., easily ascended in ½ hr., affords a good view, including the Kaaterskill Falls (p. 100; rail. station, see p. 98). — About 2 M. to the N. is *Onteora Park* (Bear & Fox Inn), a cottage colony belonging to a club which includes several well-known writers, artists, and musicians. The enclosure is private, but visitors will generally be allowed, on application at the gate, to ascend to (20 min.) the top of *Onteora Mt.* (2380 ft.), the *View from which includes High Peak, Round Top, the Kaaterskill Hotel, Twin Mt., Sugar Loaf, Plateau Mt., Hunter Mt., Round Hill, Thomas Cole Mt., Black Dome, and Black Head. — Onteora Mt. and its neighbour *Parker Mt.* are separated by the *Parker Notch* from *Star Rock* (2515 ft.; to the E.), another good point of view. — The **Black Dome** (3990 ft.), about 3 M. to the N.N.E. of Parker Mt., affords a fine panorama of the valley in which Tannersville lies and the mountains enclosing it. *Slide Mt.* (p. 103) is seen to the right, over the shoulder of Hunter Mt. — To the S. of Clum Hill (see above) extends the fine ***Plattekill Clove** (road), between *Round Top* and *High Peak* (p. 100) to the left and *Sugar Loaf* or *Mink Mt.* (3782 ft.), *Twin Mt.* (3647 ft.), and *Indian Head* (3585 ft.) to the right. About 6 M. from Tannersville are the **Plattekill Falls* (60 ft.), near which is the *Plattekill Mt. House*. A road (*Views) ascends to the right to (6 M.) the *Overlook Mt. House* (p. 101). — About 3 M. to the S. of Tannersville, on the slope of Sugar Loaf Mt., is *Elka Park*, the property of the *Lieder-Kranz* ('L. K.') of New York, with a club-house. This is

adjoined by the *Schoharie Manor*, a similar association, with a large clubhouse in the Colonial style.

From Tannersville to *Otis Summit Station* by the Catskill & Tannersville Railway, see p. 98.

Beyond Tannersville the train soon reaches (45 M.) **Haines' Corners** (1920 ft.; *Haines' Falls Ho.*, *Glen Park Ho.*, *Lox Hurst*, $ 2), the nearest station to (1/2 M.) *Haines' Falls* (see below).

*Haines' Falls, at the head of Kaaterskill Clove (p. 99), consist of two main leaps, 150-160 ft. and 80 ft. high, with other plunges lower down, making in all a descent of 475 ft. in 1/4 M. The water is dammed up in dry weather and the sluices opened for visitors (fee 25 c.). The environment of the falls is very picturesque. The bridge above the falls leads to *Twilight* or *Haines' Falls Park* (Twilight Rest, Lodge End Inn, Squirrel Inn, $ 2-3), another cottage-colony like Onteora Park (p. 102). Adjacent are *Sunset Park* (Inn, $ 4), and *Santa Cruz Park* (The Lodge, $ 2-3). About 1/2 M. to the E. of Haines' Corners station is *The Antlers Hotel* ($ 3-3 1/2), with a rail. station of its own (p. 98). — From Haines' Falls to the *Kaaterskill Falls* and *Hotel*, see pp. 99, 101.

The train now traverses wood to (47 M.) *Laurel House Station* (2065 ft.), 300 yds. from the *Laurel House* and the *Kaaterskill Falls* (see p. 100). The falls are seen to the right just before we reach the station, — 48 M. *Kaaterskill Station* (2145 ft.; carriages and stages meet all trains), situated at the W. end of *South Lake*, a pretty little sheet of water. The road to the (3/4 M.) *Hotel Kaaterskill* crosses the bridge to the S. and leads through wood. The *Catskill Mountain House* is 1 M. distant (comp. p. 99).

c. From Rondout (Kingston) to Oneonta.

108 M. Ulster and Delaware Railroad in 4-4 3/4 hrs. (fare $ 3.15; parlor-car 50 c.). Through-cars from New York, comp. p. 101.

From *Kingston Point (Rondout)* to (28 M.) *Phoenicia*, see pp. 101, 102. To the left, beyond Phœnicia, rises *Mt. Garfield* (2532 ft.). From (33 M.) *Shandaken* (1060 ft.; Palace, $ 3) coaches run through the *Deep Notch* to *West Kill* and *Lexington*. — 37 M. *Big Indian* (1210 ft.; Joslyn Ho., 2 M. up the valley, $ 1 1/2; small inn at the station) lies at the mouth of *Big Indian Valley*, with the headwaters of the *Esopus*.

This is the starting-point for a visit to (11 M.) *Slide Mt.* (see below). A road ascends Big Indian Valley (stages to Winnisook Lodge in summer, fare 75 c.), with *Balsam Mt.* (3592 ft.) to the right and *Panther Mt.* (3760 ft.) to the left. Several small hotels are passed. 5 M. *Dutcher's Panther Mt. House* (2000 ft.; unpretending, $ 1 1/2), the nearest hotel to Slide Mt., where a guide may be obtained. The road ends, 3 M. farther on, at *Winnisook Lodge*, a hunting-club and preserve. Hence a path (steep at first, then easy; 1-2 hrs.) ascends to the left to the top of Slide Mt. (4205 ft.), the highest of the Catskills. The *View from the tower here is very extensive, embracing about 70 peaks in the Catskills, Mt. Everett in Massachusetts (due E.; p. 338), etc. — A road leads across from the head of Big Indian Valley into (4 1/2 M.) *Woodland Valley*, near *Phoenicia* (p. 102).

The gradient here is very steep. 40 M. **Pine Hill** (1660 ft.; *Rip van Winkle Ho.*, from $ 3; *Hollywood Lodge*, $ 3), below the railway to the right. — 42 M. *Grand Hotel Station* (1885 ft.) is the highest point of the line, on the watershed between the Hudson

and the Delaware. To the right, on the slope of *Summit Hill* (2500 ft.), stands the ***Grand Hotel** (from $ 5), one of the most fashionable resorts of the Catskills. It commands a splendid *View, including Belle Ayr, Big Indian, and Slide Mts. Adjacent are some smaller hotels.

The train now descends, making a bend to the left, to (45 M.) *Fleischmann's* or *Griffin's Corners* (1515 ft.), which lies like a toy-town in the valley to the right. 49 M. *Arkville* (1345 ft.; Hoffmann Ho.; Commercial Ho., $ 1½; Ackerley Ho., at Margaretville, 1 M. from the station, $ 2½). We now descend along the E. branch of the *Delaware*. — 60 M. *Roxbury* (1500 ft.). — 66 M. *Grand Gorge* (1570 ft.), between *Bald Mt.* (left) and *Irish Mt.* (right).

A stage runs hence to (5 M.; fare 50 c.) *Prattsville* (Devasego Inn, $ 2), with pretty falls and the curious *Pratt Rocks*, carved into fantastic shapes and painted white by a Col. Pratt.

72 M. *South Gilboa* (1845 ft.).

75 M. **Stamford** (1765 ft.; *Rexmere*, from $ 4½; *Churchill Hall*, *New Grant Ho.*, $ 3; *Mountain View Ho.*, *Hamilton*, *Westholm*, $ 2), pleasantly situated near the source of the W. branch of the *Delaware*, is a quiet and inexpensive summer-resort. The favourite excursion is to the top of *Mt. Utsayantha* (3365 ft.; view; 2½ M. by road).

78 M. *Hobart* (1615 ft.); 87 M. *Bloomville* (1550 ft.; Bloomville Ho., $ 1½); 101 M. *Davenport Centre* (1220 ft.). — 104 M. *West Davenport* (1180 ft.).

At (108 M.) *Oneonta* (1085 ft.) we join the line from Albany to Binghamton (see p. 97).

Oneonta is also the junction of the Cooperstown branch of the Delaware & Hudson R. R. (22 M., in 1-1½ hr.), traversing the **Charlotte Valley*. — 6 M. *Cooperstown Junction*, and thence to (22 M.) *Cooperstown*, see p. 96.

8. The Adirondack Mountains.

Approaches. The Adirondacks are within 8-12 hrs. of New York by railway (comp. RR. 11a, 11c), and the principal gateways to them are *Utica* (p. 131), *Plattsburg* (p. 128), *Port Kent* (p. 126), *Westport* (p. 109), *Malone* (p. 118), and *Saratoga* (p. 119). *Plattsburg* is 12 hrs. from Boston viâ Burlington (comp. R. 42a). Fare from New York to *Utica* $ 5, parlor-car $ 1½, sleeper $ 2; to *Plattsburg* $ 8, parlor-car $ 2, sleeper $ 2; to *Port Kent*, $ 7.62; to *Westport*, $ 6.81; to *Saratoga*, $ 4.20; to *North Creek* (p. 119), $ 5.85.

General Features. The ***Adirondack Mountains**, in the N. part the State of New York, stretch from near Canada on the N. to near the Mohawk River on the S. (120 M.), and from Lakes George and Champlain on the E. to an indefinite and irregular line on the W. (ca. 80 M.), covering an area of about 8-10,000 sq. M. The mountains, which run in five parallel ranges from S.W. to N.E., rise from an elevated plateau and many of them are over or nearly 5000 ft. high. The highest range, or Adirondacks proper, is on the E. side of the district; and the loftiest peaks are *Mts. Marcy* (5345 ft.), *McIntyre* (5112 ft.), *Skylight* (4920 ft.), *Haystack* (4918 ft.), *Gray Peak* (4902 ft.), *Whiteface* (4870 ft.), *Dix* (4842 ft.), and *Basin* (4825 ft.). The whole of the district (the so-called '*Adirondack Wilderness*'), except the highest peaks, is densely covered with forest, much of which is still virgin and almost unexplored. Lumbering is carried on very extensively, and huge quantities of spruce, hemlock, and other timber are annually

EAST BOSTON

Moira
Balsam Grove Camp
Long Pond Outlet
Jo Indian Pd.
Stillwater
Wolf Pd.
Buck Mt.
Long Pd.
Brandon
Whitney Pd.
Saranac River
Bartlett
St Regis R.
Marsh Pd.
Amber L.
McDonald Pd.
Hollywood Ho.
Potter Pd.
East Pd.
Jordan
Jordan L.
Kildare Club
Derrick
Long Pd.
Willis Pd.
Floodwood
Kildare Sta.
Iron Mt.
Rollins Pd.
Moosehead Mt.
Childwold P.O.
Matumbla Mt.
Childwold Sta.
Lake View Ho.
Hotel Childwold
Downer Landing
Big
Wolf Pd.
Lit.
Fish Creek Pd.
Massawepie L.
Tupper Lake Junc.
Raquette
Tupper Lake Village
Childwold Sta.
Pierce field Sta.
Gull Pd.
Arab Mt.
Long Pd.
Triangle Pd.
Silver L.
Horseshoe
Tupper L.
Silver Mt.
Gruves Mt.
Hitchins Pd.
Horseshoe L.
Trout Pd.
Bog R.
Long Pd.
Adirondack Division
Tupper Lake
Jenkins Pd.
Frog Falls
Litchfield's
Mt Morris
Follensby Pd.
Raquette Falls
Duck L.
Conc Mt.
Sperry Pd.
Long Lake West
Round Pd.
Red Stream
Bear Pd.
Clear Pd.
Bog Lake
Berner Pd.
Little Tupper Lake
Bald Mt.
Moheqan L.
Handsome Pd.
Big
Little
Stump Pd.
Stump L.
Rock Pd.
Flatfish Pd.
Camp
Salmon L.
Bottle Pd.
Salmon L.
Moose Pd.
Moose Pd.
Owls Head
Camp Pd.
Lit Forked L.
Whitney
Brandreth
Pilgrim Mt.
Forked Lake
Camp
Buttermilk Falls
Forked L. Pd.
Minnow Pd.
Woods
Bisbrouckes
Bluff Point
Hill
West Mt.
Scotts
Eagle Lake
Camp
Blue Mt. Lake
Eagle Lake
Brightside
Sunset Camp
Marion Ho.
Pine Knot Camp
Carry Inn
Utowana L.
Hunter's Rest
Antlers
Raquette Lake
Golden Beach
Estelle Mt.
Camp
Blue Ridge
Forest House
Bull Rock Mt.
Ticonderoga
Delano
Baldwin
Saratoga
Plattsburg
Au Sable Chasm
Au Sable R.
Port Kendall
Keeseville
Ausable
Forge Mt.
Port Douglas
Augur L.
Mt Bigelow
1630
Mt Pisgah
Camp
Kamoomshine
2162
Rattlesnake
1265
Long Pd.
Willsboro
Willsboro Pt.
Willsboro R.
Cross
Rebert
Bouquet
Bouquet Mt.
Whallonsburg
Split Rock Mt.
Burn Bo
Rock R.
Westport
North We Bay
Nichols Pd.
Lake Champlain
Harbor Point
Cole Bay
Bald Knob
2023
Adirondack Springs
West Addison
Port Henry
Moriah
Chipman Pd.
Crown Pt. Furns
Cold Spring Farm
Blacksmith Crossing
Crown Point
West Bridport
Crown Point Ra.
Dibble Mt.
Penfield Buck Mt.
1589
Keeney Mt.
Street Road
Addison
Shoreham
Ticonderoga
Delano
Lake Champlain
Ausable Chasm
Au Sable R.
Ausable
Au Sable Forks
Jay
Upper Jay
Wilmington
Whiteface
Mt.
Lake Placid
Saranac Lake
Tupper Lake
Raquette Lake
Clearwater
Fulton Lakes
Utica
Trenton Falls
Wagner & Debes' Geogl Estab. Leipzig
0 1 2 3 4 5

sent down to the Hudson and St. Lawrence. The geological formations of the Adirondacks are mainly granitic and other primary rocks. In the valleys lie more than 1000 lakes, varying in size from a few acres to 20 sq. M. *(Schroon Lake)* and in height above the sea from 807 ft. *(Schroon Lake)* to 4327 ft. *(Tear of the Clouds)*. The *Hudson River* rises in the Tear of the Clouds (p. 114), and the *Raquette*, *Saranac*, *Ausable*, and numerous other rivers and streams connect the labyrinth of lakes. This combination of mountain, lake, and forest is, perhaps, unrivalled elsewhere, and the scenery is of great and varied attraction. The fauna of the district includes catamounts or 'panthers' (*Felis Concolor;* rare), black bears, wild-cats, numerous deer, foxes, otters, badgers, rabbits, black eagles, hawks, loons, wild ducks, partridges, herons, etc.; while the lakes and streams are well stocked with trout and bass. There are no rattlesnakes or other venomous serpents. — A movement is on foot to set apart about 4000 sq. M. of the Adirondacks as a State Park, but much of this is still in private hands.

Resorts. The most frequented regions include the district of the *Saranac* and *St. Regis Lakes* (pp. 107, 108, 106), *Lake Placid* (p. 110), and *Keene Valley* (p. 111), all of which contain numerous hotels and summer-camps. Through the opening of the Raquette Lake Railway (see p. 116), the beautiful *Blue Mt.* and *Raquette Lake* region (pp. 117, 116) is also easily accessible. The less mountainous districts to the W. are rarely penetrated except by sportsmen.

A fair general idea of the attractions of the Adirondacks may be obtained by the following tour. From *Plattsburg* (p. 128) to *Paul Smith's* (p. 107); thence, viâ the *St. Regis* and *Saranac Lakes*, to *Saranac Village* and *Lake Placid*, as described at pp. 107-110; from Lake Placid to *Adirondack Lodge* (p. 114); thence to *Summit Rock* in the *Indian Pass* (p. 115) and back; from Adirondack Lodge to *Keene Valley* (p. 111), either by road or (preferable for good walkers) over *Mt. Marcy* (p. 114); thence to *Elizabethtown* (p. 109) and *Westport* (p. 109). This tour may be accomplished in 8-10 days. Those who have longer time may add the *Tupper*, *Long*, *Raquette*, and *Blue Mountain Lakes* in the ways suggested at pp. 118, 116, 117.

Sport. *Deer*, which are the chief object of the Adirondack sportsman, are generally killed by 'still-hunting'. The practice of driving them into the water by hounds and shooting them from a boat and 'jack-hunting' (with a light at night) are now prohibited. The State Game Laws impose stringent limitations on the indiscriminate massacre of the deer, and there are now various reservations (comp. pp. 112, 115) in which the game is strictly preserved. Non-residents require a license ($ 20). An occasional shot at a bear may be had in the remoter recesses. The shooting of *Partridges* (ruffed grouse, *Bonasa umbellus*) is carried on with the aid of dogs. Good *Fishing* is obtained in many of the lakes and ponds. The intending sportsman should put himself at once into communication with the local talent. His outfit should be as plain, strong, and limited in extent as possible. Comp. also p. xxii.

Camping is one of the chief features of Adirondack life; the camps varying from the luxurious permanent 'Camp' of the regular visitor down to the makeshift lean-to of the sportsman. *Camping Parties* are frequently organized, and, with good guides, a cook, and efficient equipments, afford a very pleasant variation of ordinary summer pleasures. — Flies and mosquitoes are troublesome in June and July.

Guides are to be found at all the chief resorts, and the regular charge is $ 3 a day, which includes the use of their boats and cooking and table ware. Their keep is also paid by the traveller. When a guide is dismissed at a distance from his home, he expects the full daily fee and allowance for food on his return-journey. For short trips one guide and boat can take two persons, but for longer expeditions there should be a guide to each traveller. The boats are small and light, so that they are easily transported over the 'carries' between the lakes on the guide's shoulders. When horses are used for the carries the employer pays for the transportation. Nothing but small hand-baggage can be taken in the boats. — The *Adirondack Guides' Association* issues certificates and badges to its members. In the absence of a graduated tariff, the same fee is demanded for a short walk as for a severe day's work. The *Brown's Tract Guides'*

Association (for the W. part of the Adirondacks) has its headquarters at Boonville (p. 131).

The HOTELS of the Adirondacks are generally comfortable, and some of the larger ones may even be termed luxurious. Prices vary greatly.

EXPENSES. The expenses of a rapid tour through the Adirondacks are apt to be somewhat high, as the guide's fee ($ 3) and keep ($ 1-1½) have to be added to the traveller's personal expenses ($ 3-5). Camping and sporting parties live, of course, much more cheaply than hotel-guests.

The information in the following pages will suffice for a rapid tour through the Adirondacks, but those who contemplate a prolonged stay or shooting and camping parties should procure the guidebook of *S. R. Stoddard* of Glen Falls, N. Y. (with maps; price 25 c.), which is revised annually and contains details of routes, outfit, and supplies. The best available map is also published by Stoddard (50 c. & $ 1). The 'folders' issued by the N. Y. C. and D. & H. Railroads are also useful.

a. From Plattsburg to St. Regis, Tupper, Saranac, and Placid Lakes.

82 M. LAKE PLACID BRANCH OF DELAWARE & HUDSON R. R. to (73 M.) *Saranac Lake* in 3½-4 hrs. (fare $ 2.22; from New York $ 8.30); thence to (9 M.) *Lake Placid* in ½ hr. (fare 30 c.; from New York $ 8.60). Through sleeping and parlor-cars from New York.

Plattsburg, see p. 128. The train passes the *U. S. Barracks* (p. 128) and runs to the W. through the valley of the *Saranac*. It crosses the river before and after (12 M.) *Cadyville* and then ascends to the right, leaving the river. Beyond (17 M.) *Dannemora* (1810 ft.), with *Clinton Prison*, we make a wide sweep to the left, round *Johnson Mt.* To the left is *Lyon Mt.* (3810 ft.). — 28 M. *Chazy Lake* (1500 ft.; Lake View Ho., $ 2), at the S. end of *Chazy Lake* (4 M. long, 1 M. wide; trout-fishing).

From (34 M.) *Lyon Mountain*, an iron-mining village, coaches run to (3½ M.) *Ralph's* ($ 2-3 a day; fare 75 c.) and to (4¼ M.) *Merrill's* ($ 2-2½; fare 75 c.), on the E. side of *Upper Chateaugay Lake* (4 M. by 1 M.). A small steamer plies on the Chateaugay Lakes and a coach runs from the N. end of the *Lower Lake* (3½ M. × ¾ M.) to (6 M.) *Chateaugay Station*, on the Rutland R. R. (p. 312). — The railway now bends to the S. (left), affording a good view of Chateaugay Lake to the right. 54 M. *Loon Lake Station* lies at the N. end of *Loon Lake* (2 M. long); at the S. end of which is the *Loon Lake House* ($ 4-5). To the right are *Loon Lake Mt.* and *Long Pond*. At this point our line runs parallel with the Adirondacks Division of the N. Y. C. & H. R. R. R. (see p. 116; trunk transferred from one line to the other for 10 c.) — 61 M. *Onchiota*. — 66 M. *Bloomingdale* is the nearest station on this line for *Paul Smith's*, 7 M. to the W. (see below). — 73 M. *Saranac Lake* (see p. 108). 76 M. *Ames Mills;* 77 M. *Ray Brook*; 81 M. *Lyons*. — 82 M. *Lake Placid* (see p. 110). The station lies about 1 M. from the S. end of the lake (carr. fare to most of the hotels 25 c.; trunk 25 c.).

The St. Regis Lake House, known as *Paul* (properly *Apollos*) *Smith's*, a hotel (500 beds; $ 4-5 a day, $ 21-30 a week; restaurant

à la carte) on the N. bank of the *Lower St. Regis Lake* (1617 ft.; 2 M. × 1 M.), is one of the most frequented resorts in the district and may be made the starting-point for a guide-boat tour of the N. Adirondack lakes. It is connected by a private line with (5 M.) *Lake Clear Junction*, on the Adirondack & St. Lawrence Division of the N. Y. C. & H. R. R. R. (see p. 118), and is 4 M. from *Paul Smith's Station* on the same railway. Both the St. Regis Lakes are surrounded by numerous camps, and good fishing and shooting are obtained in the neighbourhood. Near Paul Smith's is the large *Sanitarium Gabriel*, managed by Sisters of Mercy.

Among the finest camps are those of *F. W. Vanderbilt* (designed and constructed by Japanese), *A. R. Stokes*, *A. W. Durkee*, *C. G. Barney*, and *Whitelaw Reid*.

The following *Round Trip is frequently made from Paul Smith's, and affords an excellent idea both of the attractions of the Adirondacks and of the ordinary methods of travelling.

The circuit is about 40-45 M., and 3 days should be allowed for it, though more may profitably be spent, especially if any digressions are made. Those who make the round trip quickly should engage their guide and boats for the whole journey; others may hire from place to place (comp. p. 105). The guides should be expressly instructed to go by the distinctly preferable 'Seven Carry Route', as otherwise they will select the 'Big Clear Route', on which two horse-carries ($ 1 and $ 1½) save them some work and add to the tourist's expenses. If desired, heavy baggage may be sent to Saranac Village by railway.

Leaving Paul Smith's, we cross the *Lower St. Regis Lake* by boat (½ M.); row to (¾ M.) *Spitfire Lake;* cross this lake (½ M.), and row to the (½ M.) *Upper St. Regis Lake* (1617 ft.), which we cross to (2 M.) its S. end. To the W. rises *St. Regis Mt.* (2882 ft.).

Here begins the carry to (1½ M.; fee for horse $ 1) *Lake Clear* ('*Big Clear*'), a pretty little lake, well stocked with fish, on the N. bank of which stands *Rice's Lake Clear Hotel* ($ 3; well spoken of). Lake Clear is 2 M. long, and a carry of 4 M. leads from its S. end to *Saranac Inn* (horse for boat $ 1½; seat in a carriage 50 c.).

On the Seven Carry Route we traverse six short carries and six small ponds and reach (3 M.) *Little Clear Pond*, which is 1 M. long and 2 M. from Saranac Inn (9 M. from Paul Smith's). In either case we cross the N. Y. C. & H. R. R. Railroad.

Saranac Inn (from $ 4; telegraph-office; golf) lies at the N. end of Upper Saranac Lake, 1¾ M. from *Saranac Inn Station* (p. 118).

***Upper Saranac Lake** (1571 ft.), 7½ M. long and ½-3 M. wide, is one of the largest sheets of water in the district. It is dotted with islands and surrounded by thickly wooded and hilly banks. Small steamers ply on the lake (fare 75 c., round-trip $ 1), calling at the *Sweeny Carry* (Wawbeek Lodge, $ 4-8, with tel. office), on the W. bank, *Indian Carry* (Rustic Lodge, $ 2½), at the S. end, and *Bartlett's* or the *Saranac Club*, on the E. side.

Wawbeek Lodge is 9 M. to the E. (stage $ 1½) of *Tupper Lake Village*, on the New York & Ottawa R. R. (see p. 118). — The *Sweeny Carry* (3 M.; horse for boat $ 2, seat in buckboard 50-75 c.) leads to *Raquette River* (Tromblee's Inn, $ 2), which may be ascended, with the help of a horse-carry ($ 1¼;

seat in carr. 50 c.) round the *Raquette Falls*, to (ca. 20 M.) the N. end of *Long Lake* (p. 117). Or we may descend the river to (11 M.) *Tupper Lake* (p. 118).

Indian Carry crosses to (1 M.) the *Stony Creek Ponds* (1640 ft.; Hiawatha Ho., $ 3-4) and to (3 M.) *Axton*, on the *Raquette River* (about 8 M. from Tromblee's).

A short carry from the landing for Bartlett's (1/4 M.; horse, unnecessary, 50 c.) leads to the stream flowing into the (1/2 M.) *Middle Saranac Lake*, more often called *Round Lake* (1536 ft.), a nearly circular sheet of water, 2 1/2 M. in diameter. This little lake is sometimes lashed by violent squalls coming down from the hills, and it is advisable to keep an eye on the weather. To the S.E. rises *Ampersand Mt.* (3430 ft.; *View), the trail to the top of which (ca. 2 1/2 M.) leads through the woods and is not easy to follow without a guide. At the N.E. corner of Round Lake we enter its pretty outlet, descending to (2 1/2 M.) the lower lake and passing about halfway a series of rapids now passed by a lock. Small steamers make two trips daily between Bartlett's and Saranac Lake Village (fare $ 1.50; round trip, $ 2).

Lower Saranac Lake (1534 ft.), 5 M. long and 3/4-1 1/4 M. wide, is surrounded by wooded hills and sprinkled with 52 islands. Near the lower (N.E.) end of the lake lies **Saranac Lake Village**, with the stations of the N. Y. C. and D. & H. railways (p. 106). It is now mainly frequented by consumptive patients, who derive much benefit from the open-air treatment here. A small steamer usually makes daily excursions round the lake (fares from 50 c. to $ 1).

The ALGONQUIN ($ 4) lies on the E. shore of the lake (omn. 50 c.). The VON DORRIEN ($ 2 1/2-3) is 1 M. to the N. The BERKELEY ($ 3-5) and the RIVERSIDE ($ 2 1/2-4) are the chief hotels in the village itself. The ADIRONDACK SANITARIUM (for consumptives) lies ca. 2 M. to the N.E.

Saranac Lake is 10 M. by road (railway, p. 106) from *Lake Placid* (p. 110). The road turns to the right in the village, 1 1/2 M. from the lake, and passes (2 1/2 M.) *Ray Brook* (p. 106). At (3 M.) the fork the left branch leads to (3 M.) *Lake Placid*, the right to (5 M.) *North Elba Post Office* (p. 110).

We may now return to Paul Smith's by railway (see p. 118).

b. From Port Kent to Ausable Chasm and Lake Placid.

Port Kent lies on the W. shore of *Lake Champlain* (see p. 126), nearly opposite *Burlington* (p. 311; steamer), and within 8 1/2 hrs. by railway of New York (comp. R. 11a; fare $ 7.62).

A short branch-railway (omn. from steamer to station 10 c.; included in price of through-tickets) runs in 20 min. from Port Kent to (2 3/4 M.) *Ausable Chasm* (*Ausable Chasm Hotel, $ 4; Maple Cottage, $ 2) and to (6 M.) *Keeseville* (Commercial, $ 2; p. 128).

The **Ausable Chasm is, perhaps, the most wonderful piece of rock-formation to the E. of the Rockies, and should not be omitted by any traveller who comes within a reasonable distance of it. The *Ausable River*, a large and rapid stream, here flows through a rocky gorge only 20-40 ft. wide, between perpendicular walls of Potsdam sandstone, 100-175 ft. high. Waterfalls and rapids add to the

attractions. A visit to the chasm has been facilitated by paths and bridges; and the boat-ride through the rapids affords a novel and exciting but perfectly safe experience. Numerous interesting fossils *(lingula antiqua, trilobites)* have been found here.

The ENTRANCE to the chasm (adm. $ 1½, including boat-ride and carriage back to hotel; rebate of 50 c. if visitor gives up the boat-ride and returns on foot from Table Rock) is a little to the N. of the **Trestle Bridge*, a few minutes from the Ausable Chasm Hotel. At the head of the chasm (to the left) are the *Rainbow or Birmingham Falls, 70 ft. high, while near the point where we enter are the lower Horseshoe Falls. Following the path to the right over the ledges (smooth as if made artificially), we round the *Elbow*, beyond which, across the stream, rises the *Pulpit Rock* (135 ft.). Below the *Split Rock* or *Elephant's Head* (l.) we cross the stream. Farther on more or less appropriate names are attached to the various phenomena, such as the *Devil's Oven* (r.), *Hell Gate*, *Jacob's Ladder* (r.), the *Devil's Punch-Bowl* (l.), *Jacob's Well* (l.), *Mystic Gorge* (l.), *Shady Gorge* (r.), the *Long Gallery*, *Point of Rocks* (l.), *Hyde's Cave* (r.), *Column Rocks* (r.), and the *Post Office* (l.; so-named for very obvious reasons). We are now in the *Upper Flume*, at the lower end of which we cross to the flat *Table Rock*, where the boat-ride begins and where many visitors turn back. Here, to the right, tower the **Cathedral Rocks* and the **Sentinel*, 100 ft. high. The boat at first passes through the **Grand Flume*, the rocky sides of which are 175 ft. high, while at one place the river is 60 ft. deep and only 12 ft. wide. Emerging from the Flume, we pass through a quiet pool and enter the **Rapids*, through which we sweep swiftly to the landing-place at the foot of the chasm. We may now either walk or drive back to the (1½ M.) hotel.

Stages no longer run from the Ausable Chasm to *Lake Placid* (p. 110), but those who do not wish to retrace their steps may hire a carriage for the picturesque but somewhat long drive (32 M.) viâ (13 M.) *Ausable Forks* (p. 128), and (21 M.) *Wilmington* (p. 111).

c. From Westport to Elizabethtown, Keene Valley, and Lake Placid.

Adirondack Lodge. Indian Pass.

Westport (**Westport Inn*, overlooking the steamboat-wharf, $ 4-5; *Glenwood Inn*, $ 2; *The Westport*, at the rail. station, not to be confounded with the Westport Inn, $ 2, unpretending) is a village of about 500 inhab., on the W. shore of Lake Champlain, 25 M. to the S. of Port Kent (p. 108) and 10 M. to the N. of Port Henry (p. 125). It is the chief gateway to, perhaps, the finest part of the Adirondacks. Kellogg's stages meet the trains and boats here and carry passengers to (9 M.) *Elizabethtown* ($ 1). From Elizabethtown Agnew's stages, starting at 8 a.m., run to *Keene Centre* (12 M.; fare $ 1), *Cascade Lakes* (18 M.; $ 2), and *Lake Placid* (28 M.; $ 4). At Keene Centre we connect with the stage for *Keene Valley* (p. 111; fare from Elizabethtown $ 1½). With a private carriage we may reach Lake Placid from Westport (37 M.) in one day. Westport is within 7 hrs. of New York by fast train (comp. R. 11a; fare $ 6.81).

The ROAD TO ELIZABETHTOWN (9 M.; stage at 8 a.m.) is pleasant, but calls for no special remark. — **Elizabethtown** (600 ft.; *Deer's Head Inn*, $ 3-4; *Windsor*, $ 2½-4; *Maplewood Inn*, 1 M. to the N., open the whole year, $ 2-4), a village with about 500 inhab. and a

court-house of 1785 (remodelled in 1884), is prettily situated on the *Bouquet River*, in the well-named *Pleasant Valley*.

Among the points of interest in the neighbourhood are *Cobble Hill* (1790 ft.), just to the S.W. of the town, with golf-links; *Raven Hill* (1970 ft.), to the E.; and **Hurricane Mt.* (3685 ft.), 5 M. to the N.W. (cart-road; path to the summit 2 M. more), a fine point of view. On the W. side of Hurricane Mt. is the **Hurricane Lodge* ($ 3). — A road leads to the S., viâ the (8 M.) *Split Rock Falls*, (10 M.) *Euba Mills*, and (23 M.) *Schroon River P. O.*, to (32 M.) *Schroon Lake* (p. 119). — To the N. a road leads to (22 M.) *Keeseville* (p. 103), viâ *Pokamoonshine Mt.* ('Poke o'Moonshine'; 2162 ft.) and *Augur Lake* (549 ft.).

The *Road from Elizabethtown to Lake Placid (28 M.; from which the roads to Keene Valley and Adirondack Lodge diverge) passes through one of the most beautiful parts of the Adirondacks. It leads to the W., passing between *Hurricane Mt.* (see above) on the right and several lower hills on the left. 10 M. *Keene Valley* (see p. 111) opens to the left. Our road turns N. to (2 M.) *Keene Centre* (857 ft.; Hotel, D. 75 c.). Beyond Keene the road turns sharply to the left (S.E.) and ascends to the (4 M.) beautiful **Cascade Lakes* (2040 ft.; well stocked with trout), with *Pitch Off Mt.* (3520 ft.) rising so abruptly to the right as barely to leave room for our passage. *Long Pond Mt.* (4090 ft.) rises equally sheer on the other side of the lakes. The **Cascade Lake House* (6 M. from Keene; $ 3, D. $ 1) is a favourite resort of fishermen and others. Ahead of us we now obtain a fine *View of the mountains enclosing Lake Placid. — 4 M. *Ames's Mountain View House.* Among the mountains seen to the S. (left) are Mts. Marcy and McIntyre (p. 114), the two loftiest peaks in the state. At *North Elba Post Office*, about 1 M. farther on, the road to (5 M.) *Adirondack Lodge* (p. 114) diverges to the left, and after 2 M. more the Riverside Drive (p. 111) leads to the right. [*John Brown's Farm* (p. 111) lies about 1/2 M. to the W. of this part of the road.] Just beyond this point our road crosses the *Ausable River* and diverges to the right from the main road, which goes on to (10 M.) *Saranac Lake Village* (p. 108). — 3 M. *Lake Placid.*

*Lake Placid (1964 ft.), 4 M. long and 2 M. broad, is surrounded by finer and higher mountains than any other of the larger Adirondack lakes, and numerous hotels and cottages have been built on its banks. It contains three islands, *Hawk*, *Moose* (owned by the *Lake Placid Club*), and *Buck*. At its S. end it is adjoined by *Mirror Lake*, 1 M. long and 1/3 M. wide. Boating and fishing are carried on on both lakes, and golf-links have been laid out. Mt. Whiteface (p. 111) is conspicuous at the N.E. end of Lake Placid, while *McKenzie Mt.* (3190 ft.) rises to the W. The *View to the S. includes the peaks (named from left to right) of Gothics, Saddleback, Basin, Marcy, Colden, and McIntyre, with Indian Pass (p. 115) to the right of the last. A small steamer plies on Lake Placid (round trip, in 1 3/4 hr., 50 c.), and motor-launches may be hired.

Most of the hotels and other houses are clustered round the S. end of Lake Placid and Mirror Lake. **Stevens House* (1965 ft.; $ 4-6), on the ridge

between the two lakes; *Grand View Hotel* ($ 4-5), to the S. of the Stevens Ho.; *Lake Side Inn* ($ 2½), to the S.E., and *Lake Placid Inn* ($ 3), to the E. of the Stevens Ho., with view of both lakes; *Ruisseaumont Ho.*, to the N. of the last ($ 4-6); *White Face Inn* ($ 4), in a sequestered site on the S.W. side of Lake Placid; *Undercliff Camp* ($ 15-30 per week), on the W. bank of Lake Placid. *Camp Asulykit (Mr. McCutcheon)*, near the White Face Inn, is one of the finest in the Adirondacks.

The **Lake Placid Club** (open in winter also), the large park of which occupies the S. and E. sides of Mirror Lake, has no shooting or fishing preserves, but provides its members with excellent facilities for golf, boating, bathing, riding, driving, mountain-climbing, and other outdoor sports. Its four large club-houses and other buildings accommodate 3000 persons. The annual subscription is $ 30. Visitors, on the introduction of a member, may stay here 14 days (from $ 3½), and strangers are generally allowed to lunch or dine on application at the office.

Excursions. The path to (3 M.; ca. 2 hrs.) the top of *Mt. Whiteface 4870 ft.) begins at the N. end of Lake Placid (guide desirable). The *View includes the main Adirondack peaks (S.), Lake Champlain (E.), the Saranac and Tupper Lakes (W.), and about 60 smaller sheets of water, while on the N. it reaches to Canada and the St. Lawrence. The descent may be made by bridle-path and cart-track to (6 M.) *Wilmington* (see below). — *McKenzie Mt.* (3890 ft.) may be ascended in 2 hrs. (no path). — *John Brown's Farm is in a lonely spot, 3 M. from Lake Placid (comp. p. 110). The sturdy old Abolitionist (comp. p. 351) had his home here from 1849 till his death (1859), and now lies buried in a small enclosure near the house, with a huge boulder marking the spot. Walkers may cut off 2 M. of the route to *Adirondack Lodge* (p. 114) by descending to the *Ausable* from John Brown's, crossing the river by stepping-stones, and following a path through the woods, which joins the road in 2 M. — The name of **Riverside Drive* is given to a round of 10 M., following the Keene road for 3 M., then descending the Ausable to (4 M.) the iron bridge on the road to Wilmington (see below), and returning thence direct to (3 M.) Lake Placid.

The *Road through the Wilmington Notch to Ausable Forks (26 M.) diverges to the left (N.) from the road to Elizabethtown, at a point 3 M. from Lake Placid (see p. 110). The **Notch* (10 M.) is a defile on the S.E. flank of *Mt. Whiteface* (see above), through which flows the W. branch of the Ausable, scarcely leaving room for the road. The finest points are the *High Falls* (adm. to best points of view 25 c.) and the *Flume*. *Wilmington* (Bliss House, Hotel Olney, $ 2), 6 M. farther on, is a good starting-point for an ascent of Whiteface (see above; saddle-horse $ 4, guide $ 3). At *Ausable Forks* (10 M. farther on), where the two branches of the *Ausable* unite, we reach the railway (see p. 128).

Among the numerous other excursions made from Lake Placid are those to *Adirondack Lodge* (10 M.; see p. 114) and *Keene Valley* (21 M.; see below).

***Keene Valley** (approaches, see p. 110), extending for 8 M. to the S. from *Keene Centre* (p. 110), is, in its combination of the gentler and the sterner beauties of scenery and its convenience as a centre for all kinds of excursions, one of the most desirable headquarters in the Adirondacks. It is watered by a branch of the *Ausable*, and is enclosed by two mountain-ranges, including *Hopkins Peak*, the *Giant of the Valley*, and *Noon Mark* on the E., and *Porter Mt.*, *Twin Mts.*, and the *Wolf's Jaws* on the W. The autumn colouring of the trees is often rich beyond expression.

The valley is traversed by a good road, which passes (5 M.) *Keene Valley Village* (1030 ft.). To the W. of the village is the *Hotel Crawford* ($ 2½). At the head of the valley are the *Club House* (1350 ft.; formerly *St. Hubert's Inn*) and *Cottages* of the **Ausable Club**, where travellers, unless introduced by a member, may stay for one night only ($ 4). The *View is superb. Immediately facing the Ausable Club, to the S.E., rises Noon Mark, with the

long ridge of the Giant and Hopkins Peak to the left and the conical Mt. Colvin to the right. To the N. we look down the Keene Valley, and to the S.W. is the road to the Ausable Lakes, between Mt. Colvin and Mt. Resegonia. In front of the Ausable Club lie the St. Hubert Golf Links. — On the farm of *Glenmore*, at the N. end of the valley, not far from Hurricane Lodge (p. 110), is the *Summer School of Philosophy*.

The following EXCURSIONS are described with the Ausable Club as centre, but it will be easy to make the necessary rectification for other starting-points in the valley. — Keene Valley has excellent *Guides*, a list of whom may be obtained at the hotels. The regular fee is $3 a day for any excursion; a graduated tariff is an obvious desideratum which has not yet been adopted. — Many new trails have been constructed by the *Adirondack Trail Improvement Society*.

*Ausable Lakes, ca. 15 M. (there and back). This is the favourite excursion from Keene Valley and should on no account be omitted. The lakes are included in the *Adirondack Mountain Reserve*, a tract of about 40 sq. M. to the S. of Keene Valley, bought and controlled by a company and occupied by the Ausable Club. Ordinary visitors are freely admitted to the roads, walks, and trails (toll 25 c. each), but to visit the upper lake a special card (25 c. per day) must be obtained and a club-guide and canoe engaged through the Superintendent. The entrance to the Reserve is a little to the S.W. of the Ausable Club, A fine road, constructed by the company, leads hence to the (3½ M.) *Lower Ausable Lake (1961 ft.; boat-house, with rfmts., boats to hire, etc.), a small sheet of water, about 2 M. long, surrounded by beautifully wooded mountains descending sheer to the water. To the left rises *Indian Head* (2535 ft.; *View), a knob of Mt. Colvin; to the right are the finely formed *Gothics* and *Mt. Resegonia* or *Saw Teeth*. [From the boat-house we may make a trip by boat (1-3 pers. 15 c., each pers. addit. 5 c.) to (10 min.) the landing for *Rainbow Falls*, a veil-fall of about 100 ft. (rainbow 12-2 p.m.).] From the upper end of the lake a good trail leads to (1¼ M.) the *Upper Ausable Lake (1993 ft.), which is 1¾ M. long. 'In the sweep of its wooded shores, and the lovely contour of the lofty mountains that guard it, this lake is probably the most charming in America' (*Warner*). To the right (named from left to right) are *Skylight*, *Haystack*, *Bartlett Ridge*, *Basin*, *Saddleback*, *Gothics*, and *Resegonia*; to the left, *Colvin* and the *Boreas Range*. (Mt. Marcy is not seen from either lake.) The lake is surrounded with camps belonging to the club, where meals are usually cooked and eaten before returning. Visitors may spend three days in camp (25 c. each per night). Before returning we may row up the inlet of the lake as far as (½ hr.) the *Elk Lake Trail* (see below) and then follow the general course of the stream (avoiding paths to the left) to (20 min.) *Panorama Bluff*, which commands a splendid *View of the mountains (from left to right: Allen, Skylight, Marcy, Haystack, Bartlett Ridge, Basin, Saddleback, Gothics, Resegonia). Route to *Mt. Marcy*, see p. 114. — A trail beginning about 1¾ M. above the Upper Ausable Lake, a little beyond the Marcy trail (p. 114), leads to the E. over the *Boreas Range* to (5½ M.) *Elk Lake* (1986 ft.), whence a road leads S. to (5 M.) the road from Tahawus (p. 115) to *Schroon River Post Office* (p. 115; 5 M. to the E.).

SHORT WALKS. The *Russell Falls* are reached in 10 min. by a path descending from the back (S.W. corner) of the Ausable Club. — The foot of *Roaring Brook Falls*, descending for about 300 ft. over a cliff on the W. side of the Giant, is about ¾ M. to the E. of the club. We follow the Port Henry road to (10 min.) the fork, turn to the left, cross the bridge, and follow the Giant trail to the right (sign). The Roaring Brook trail keeps straight on beyond the turnstile where the Giant trail (sign; 5 min.) ascends to the left. A few minutes farther on the Artist Brook trail (sign) diverges to the right from the Roaring Brook trail. By following the Port Henry road for 1½ M. farther, we reach *Chapel Pond* (1602 ft.; right). A steep path, a little farther on, to the left, ascends to (20-30 min.) the *Giant's Washbowl* (2250 ft.), a solitary mountain-tarn at the foot of a gigantic cliff. A trail (marked by 'blazes' on the trees)

leads hence to the W. to (1 M.) the top of Roaring Brook Falls (p. 112), whence we regain the road by descending on the right side of the stream (a round in all of 4-5 M., taking 2-3 hrs.). — With the last-mentioned walk may be combined a visit (2 hrs. more) to *Round Pond* and *Bouquet Falls* (trails indistinct; guide desirable). — To reach the (3 M.) *Cathedral Rocks* we follow the Ausable Lake road for 1/2 M. and then cross a rustic bridge to the right. With this may be combined a visit to the small *Pyramid Falls* (someone to point out the way desirable). — *Artist's* or *Chapel Brook*, 1 1/2 M. We proceed as in the Roaring Brook Walk to (ca. 25 min.) the finger-post mentioned at p. 112. The scenery somewhat resembles the Torrent Walk at Dolgelley.

Ascents. Experts may dispense with guides in the first six. — *Noon Mark (3552 ft.; 1 3/4-2 1/2 hrs.). We diverge to the right from the Chapel Pond road, just beyond Prof. Felix Adler's cottage, and follow the broad path, which soon climbs along the left side of a ravine to (35-45 min.) a bare ledge (view). The path then follows a gentle ridge and (in 25-35 min.) begins to ascend steeply to (30-40 min.) the top. The *View includes Keene Valley and its bounding mountains, Mt. Dix, with its curious knob (S.), Nipple Top, and the Marcy group. — Mt. Colvin (4074 ft.; 2-3 hrs.). The path ('Sebille Trail') leaves the Ausable Lakes road to the left, about 3/4 M. on this side of the lower lake, and ascends the left side of *Indian Head* (p. 112; sign-boards). 35 min. Path to (5 min.) *Wizard's Washbowl*, to the left. 1/2 hr. (l.) Path to (6 min.) *High Falls*. 5 min. (l.) Trail to *Fairy Ladder Falls* and *Nipple Top* (4685 ft.). 35 min. (r.) High white cliff, a little beyond which are a large rock and a small spring (r.). 20 min. Top (highest point reached by ladders). The *View to the N. includes the Ausable Lakes and the highest peaks of the Adirondacks (named from left to right: Skylight, Marcy, Haystack, Basin, Saddleback, Gothics, with Saw Teeth in front, and Wolf's Jaws). — *Giant Mountain (4622 ft.; 2 1/2-3 1/2 hrs.). The path (sign) beginning at the junction of the Keene Valley village road with that coming from the Ausable Club, diverges to the left from the track to Roaring Brook Falls at (1/4 hr.) the turnstile mentioned at p. 112. 15-20 min. *Corduroy Bridge*, beyond which we follow 'blazes' through the wood to the left and reach (3 min.) the brook. A foot-worn trail, also indicated by blazes, ascends hence steadily for 1-1 1/4 hr. (The right branch at the fork is of easier gradient.) Then follows 1/2-3/4 hr.'s scramble over rocks to the end of the S. spur. Hence to the top 1/2 hr. more. (A little to the N.E. of the Signal is a small pool of water.) The *View includes Lake Champlain and the Green Mts.; and Mt. Washington (p. 331) is said to be visible in clear weather. — Hopkins Peak or *Mt. Hopkins* (3175 ft.; 2 1/2-3 hrs.). The Mt. Hopkins trail begins about 1 M. from the Ausable Club, just on this side of the iron bridge over the *Ausable*. It then leads to the right along the right bank of the Ausable, and in 10 min. comes out near a house, where we turn to the right, and follow the *Mossy Cascade* path. In 5 min. more we cross the water-pipe and reach the second Mossy Cascade sign. At (5 min.) the third Mossy Cascade sign the Mt. Hopkins path ascends to the right. In 10-14 min. we cross a brook and follow the 'blazed' trees which mark the trail. In ca. 2 hrs. from the start our trail is joined on the left by that from the site of the Tahawus House. In 3/4 hr. the path emerges on the bare ledges. (It is well to mark this point in some way as a guide in returning.) 5 min. Top. The *View includes Mt. Marcy, Mt. McIntyre, Whiteface, the Giant, etc. — Mt. Baxter (2400 ft.; 1 1/2-2 1/2 hrs.). The path begins about 3/4 M. to the W. of the cottage of 'Old Mountain Phelps,' which is 3/4 M. from the Tahawus House. The *Balcony*, a bare ledge on the W. summit, commands a splendid view of Keene Valley, and it is hardly worth while to climb (20 min. more) to the top of the highest (middle) peak. — Gothics (4740 ft.; 2 1/2-3 1/2 hrs.). The trail begins to the right of the Ausable Lake road, 2 M. from the Ausable Club. It is not very clear at first, but, after crossing (1/4 hr.) the Ausable, improves. 3 min. Cascade. 1 1/2 hr. Ridge at right angles to our course, which the trail skirts to the right. 1/2 hr. Hollow, with swampy pool. The (15-20 min.) top commands a good near

*View of Mt. Marcy, with Mt. McIntyre to its right. Lake Placid and Whiteface are seen in the distance (N.). Dix Mt., with its singular notch, is conspicuous to the S.E. — *Mt. Marcy or *Tahawus* ('Cloud-splitter'; 5345 ft.; two days; guide necessary), the highest of the Adirondacks. This is a grand but somewhat fatiguing excursion, which should not be lightly undertaken. The night is spent in Boulder Camp (see below), and the descent may be made to Adirondack Lodge (see below). Campers on the Upper Ausable Lake can make the trip in one day (ascent 4-5 hrs., descent 3-4 hrs.). The old path † (7 M. long) begins at the little bay called '*Cold Slough*' in the inlet of Upper Ausable Lake, about 1½ M. beyond its S. end, and at first crosses boggy ground. 25 min. Path diverging to the left (our path straight on). ¾ hr. *Lookout Point*, a high sandy bank. The path becomes steeper and in 40 min. crosses *Marcy Brook*. 10 min. Path leading to the right to (5 min.) *Boulder Camp* (see above). The main path becomes steep and wet. 40 min. Col between *Skylight* (l.; 4920 ft.) and Mt. Marcy, with a spring of good water and the remains of *Summit Camp*. The trail crosses a tract of low balsams to (25 min.) the open ledges, beyond which there is no trail. The top is reached in ¼ hr. more. The *View embraces the whole of the Adirondacks, with Lake Champlain and the Green Mts. to the E. To the S.E., between us and the dark *Haystack*, lies the deep and narrow *Panther Gorge* (3350 ft.). At our feet (S.W.) lies the *Tear of the Clouds*, a small lake 4327 ft. above the sea, which is the highest source of the Hudson (p. 82). The trail from the top to *Adirondack Lodge* is 7½ M. long (p. 115). — Among other mountains that may be ascended from Keene Valley, with guides, are *Dix Mt.* (4842 ft.; one long day), *Haystack* (4918 ft.; one day), *Nipple Top* (4685 ft.; 8 hrs.), and *Mt. Porter* (4070 ft.; 3½-4½ hrs.).

Schroon Lake (p. 119) is reached from Keene Valley by the Port Henry road (see p. 112) to (8 M.) *Euba Mills*, and thence as at p. 110. — There is no very direct or easy route connecting Keene Valley with the *Long Lake* and *Blue Mountain* district. Perhaps the best route is by the trail over the *Boreas Range* (p. 112) or by the *Tahawus Trail* (p. 115). Or we may go viâ *Saranac Lake* as described at pp. 107, 108. Lastly, we may return by train, viâ Westport, to *Saratoga*, and proceed thence as in R. 8e.

Adirondack Lodge (2160 ft.), a rustic hotel in the dense forest to the N. of Mt. McIntyre and 5 M. from the highroad, was burned down in 1903, and at present there is practically no accommodation for tourists here. [The excursions described below may, however, be made by driving from Lake Placid to (10 M.) the site of the Lodge (comp. p. 111).] In front of the lodge-site lies the pretty little *Heart Lake*, reflecting the form of *Mount Jo* (see below), opposite Mt. McIntyre. No sign of human habitation is visible. Beyond the lodge (to the S.) all roads cease, and the only means of communication are 'trails' through the virgin forest, sometimes followed by the 'blazes' only (guides generally desirable). — *Indian Pass*, see p. 115.

Excursions. To *Avalanche Lake*, 5 M. The trail leads to the S., through the woods. This pretty little lake (2663 ft.) lies between Mt. McIntyre and Mt. Colden. The trail is continued along its W. side to (1½ M.) *Lake Colden* (2764 ft.; log-camp). From Lake Colden a trail leads to the W. to (7 M.) the Tahawus Club (p. 115), viâ (2 M.) *Calamity Pond*. — *Mount Jo* (3000 ft.) is climbed in ½-¾ hr. and affords a good view. — *Mt. McIntyre (5112 ft.), the highest but one of the Adirondacks, is ascended hence in 2-3 hrs. (descent 1½-2 hrs.; path steep, esp. towards the top; guide desirable). The trail winds round the W. side of *Mt. Wright* (to our left). About halfway up are the small *Silver Cascade* and *Hermit's Cave*. The *View includes Mt. Marcy (to the S.E.), Lake Colden (but not Avalanche Lake), Colden

† There is now also another and somewhat shorter trail, beginning on the W. side of Upper Ausable Lake and joining the main path above the Bartlett Ridge.

Mt., Saranac Lakes, the finely formed Gothics, the noble form of Whiteface, the splendid precipice of Wallface (see below), Mt. Seward, etc. Lake Champlain is said to be visible in clear weather. — *Mt. Marcy (p. 114) is climbed hence by a trail 7½ M. long, in 4-5 hrs. (descent 2½-3½ hrs.; guide necessary). The first half of the ascent is generally very muddy and fatiguing. The trail passes the *Crystal Falls* and (near the summit) the *Tahawus Cabin*. Those who mean to descend to Keene Valley telegraph for a boat to meet them at the inlet of Upper Ausable Lake (comp. p. 114), and should arrange to pass the night in Boulder Camp (p. 114). *View, see p. 114. — To the *Iroquois Ravine*, see below. — To *Scott's Pond*, see below. — A trail leads through the woods from Adirondack Lodge to (5-6 M.) *John Brown's Farm* (p. 111). — The *South Meadow Trail* (easy to follow) diverges to the right from the road to the highroad, 1 M. from the Lodge, and leads to the E. viâ the *South Meadows*, and then to the N. to the highroad, which it reaches about 2 M. to the W. of the *Cascade Lakes* (p. 110). This route is uncomfortable in wet weather.

From Adirondack Lodge through the Indian Pass to the Tahawus Club, Lake Henderson, and Tahawus, 23 M. (9-10 hrs.; guide necessary).

The trail begins at the W. end of *Heart Lake* and leads to the S.W. On either side it is bordered by virgin forest. After about 3 M. the trail through the **Iroquois Ravine*, a fine gorge on the slope of Mt. McIntyre, diverges to the left. In about 2 M. more (2 hrs. from Adirondack Lodge) we reach *Fish Camp*, where meals are sometimes cooked by the guide. [The trail to *Scott's Pond*, 3 M. to the S.W., here diverges to the right.] The next mile involves a good deal of rough clambering over rocks (no danger) and leads us to (¾ hr.) *Summit Rock*, in the centre of *Indian Pass (2940 ft.), a magnificent ravine between Mt. McIntyre and Wallface. In front of us the *View stretches over a sea of forest to (5 M.) Lake Henderson, 1100 ft. below us, while to the right the majestic rocky wall of *Wallface (3890 ft.) rises sheer to a height of 1300 ft. The headwaters of the *Hudson*, flowing to the S., and the *Ausable*, flowing to the N., rise here so close to one another that part of a pail of water emptied at the summit would find its way to New York Harbour and part to the Gulf of St. Lawrence. [Those who do not wish to go on by this route to the Blue Mt. country may turn back here, as this view commands the entire pass and the trail farther on is rough and neglected. Good walkers, however, may go on to Lake Henderson and return to Adirondack Lodge by the Lake Colden route (p. 114).] Our path then begins to descend rapidly, at first over rocks. Farther on it is easier and more gradual. In 5 M. (2 hrs.) from Summit Rock we reach *Lake Henderson* (1875 ft.), the E. bank of which we follow to (2 M.; ¾ hr.) the deserted hamlet of Adirondack or the *Upper Iron Works*, with the house of the *Tahawus Club* (introduction necessary), which holds 40 sq. M. of the surrounding country as a game and fish preserve. *Mt. Marcy* (p. 114) may be ascended hence in 5-6 hrs. by a trail (12 M.) leading viâ *Calamity Pond* to *Lake Colden* (p. 114) and then striking to the right and passing the *Tear of the Clouds* (p. 114; guide necessary). To the W. rises (4 M.) *Mt. Santanoni* (4645 ft.), and to the N.W. (8 M.) *Mt. Seward* (4385 ft.). The Iron Works were established in 1826 by a Mr. Henderson, who was killed by an accident at Calamity Pond (p. 114) in 1845, after which they were abandoned. — From the Tahawus Club a fair road leads to the S., passing *Lake Sanford* (1722 ft.; 3½ M. long), to (10 M.) *Tahawus*, where there is another club-house of the Tahawus Club. Hence we may drive to the right (W.) to (19 M.) the *Sagamore*, at *Long Lake* (p. 117), or to the left (E.) to (19 M.) *Schroon River P.O.*, 8 M. to the N. of *Schroon Lake* (p. 119).

d. From Utica to Malone viâ the Tupper and Saranac Lakes.

167 M. St. Lawrence and Adirondack Railway (N. Y. C. R. R. system) in 5¼-7 hrs. (fare $ 5; parlor-car $ 1). Through-carriages run from New York to all points in the Adirondacks reached by this railway (to *Tupper*

Lake Junction in 9 hrs., $7.70; to *Saranac Inn* in 10 hrs., $8.10; to *Raquette Lake* in 9½ hrs., $7.40; to *Malone* in 11 hrs., $9.20; parlor-car or sleeper $2). The line traverses the whole of the Adirondack Wilderness from S. to N. and now forms, especially since the opening of the branch to Raquette Lake (see below), the chief approach to the Adirondacks from New York.

Utica (Rail. Restaurant), see p. 131. — The line runs towards the N.W. 17 M. *Trenton Falls*, see p. 131. We cross the *West Canada Creek*. 21 M. *Remsen*, see p. 131; 30 M. *Forestport*, for *Honnedaga Lake;* 35 M. *White Lake* (Studor's Hotel, ¾ M. from the station, $2); 46 M. *Otter Lake* (Hotel, $2-3). At (43 M.) *McKeever*, the station for *Moose River* and *Woodhull Lake*, we cross the *Moose River*. — From (52 M.) *Fulton Chain* a branch-line runs to (2 M.) *Old Forge* (Forge Ho., from $2), whence a small steamer ascends the **Fulton Lakes.**

The **Fulton Chain of Lakes** (1700-1800 ft.), eight in number, connected by streams, form a favourite resort of sportsmen and anglers. The steame passes through the so-called *First*, *Second*, and *Third Lakes* (Bald Mountain Ho., on Third Lake, $2½-4) to the head of *Fourth Lake* (Eagle Bay Hotel, $3-4; Cedar Isle Camp, $3; Rocky Point Inn, from $3; Arrowhead, $2-4). At *Eagle Bay* the steamer connects with the Raquette Railway (see below). — From the steamer terminus, at the Arrowhead, a stage lins runs to the foot of Sixth Lake, and steamers on *Sixth* and *Seventh Lakes* (Seventh Lake Ho., $2-3) make a convenient approach to the camps and hotels on the upper lakes; or a delightful trip may be made, by meaus of amal boat and carries, through Sixth, Seventh, and *Eighth Lnkes* and the *Brow'n Traci Inlet* to (3-4 hrs.) *Raquette Lake* (see below).

Beyond Fulton Chain our line followh the N. Moose River.

At (57 M.) **Clearwater** connection is made with the Raquette Railway for Raquette Lake and Blue Mountain Lake (see below.)

From Clearwater to Raquette Lake, 18¼ M., railway in 50 min. (fare 95 c.). This line crosses the N. branch of the Moose River, passing (2 M.) *Rondaxe*, on the lake of that name. — 6 M. *Bald Mountain* (see above), on Third Lake; 7 M. *Fairview*. — At (9 M.) **Eagle Bay** (hotels, see above), near the head of Fourth Lake, connection is made with the steamers for all points on the Fulton Lakes (see above). — From (12 M.) *Uncas Road* a private carriage-road leads to *Mohegan Lake*, where Mr. J. P. Morgan has a large and luxurious summer-camp, and to *Sagamore Lake*, the summer-home of Mr. Alfred G. Vanderbilt. — 18¼ M. *Raquette Lake* (Station Restaurant).

***Raquette Lake** (1763 ft.), the most irregularly shaped of the Adirondack lakes, with numerous promontories and bays, is about 10 M. long (5 M. in a direct line) and 1-2½ M. wide. It is surrounded by low hills, and the environing forests teem with game.

The following are the Lake Raquette hotels (*i.e.* camps, with cottage or tents): *Antlers* (§ 4), *Hunter's Rest* ($ 2½), on the W. bank; *Sunset Camp*, on Wood's Point, near the Marion River Outlet ($ 2½); *Brightside*, on the point to the N. of The Antlers ($ 2½-3). — Among the elaborate **Private Camps** round Raquette Lake are those of Mrs. C. P. Huntington *(Pine Knot)*, Mrs. O. Carnegie, Mr. R. F. Collier, and Mrs. Frank Platt.

FROM RAQUETTE LAKE TO BLUE MOUNTAIN LAKE, 12 M., steamers and railway of the *Raquette Lake Transportation Co.* in 2¼ hrs. (fare to Marion Carry 50 c., to Blue Mountain Lake House $ 1.25). The small steamer passes *The Antlers Hotel* and crosses the lake to the *Marion River*, along which it proceeds to *Marion River Carry* (Carry Inn, $ 2½, D. 75 c.), where we leave the boat and take the railway across a short carry (½ M.) to *Utowana Lake*. Traversing this narrow lake (2½ M. long) to its E. extremity, the steamer threads a connecting stream and enters *Eagle Lake*. Here, on the site of the 'Eagle's Nest', a farm-house on the N. bank, formerly the home of 'Ned Buntline', the author, the Eagle's Nest Golf Club links have been laid out, and a club-house hotel built. The steamer again passes through a narrow outlet, enters Blue Mountain Lake, and proceeds to the station at its farther end.

Blue Mountain Lake (1789 ft.), 3 M. long and 2 M. wide, lies at the base of *Blue Mt.*, which rises to the N.E.

The hotels on the lake are the *Blue Mt. Lake House* ($ 3-4), at the E. end, and the *Blue Mt. House* (225 ft. above the lake; $ 2-2½). — **Blue Mountain** (3760 ft.) is ascended by a bridle-path in 2 hrs. — A road leads N. from Blue Mt. Lake, through the woods, to (11 M.) *Long Lake Village* (see below; stage in 3 hrs., fare $ 1½).

From Blue Mountain Lake to (30 M.) *North Creek*, see p. 119.

FROM RAQUETTE LAKE TO LONG LAKE, 12 M., by small boat, with guide. From the N. end of Raquette Lake we cross a short carry (½ M.) to **Forked Lake** (1750 ft.), a picturesque sheet of water, with several private camps.

Those who are bound for the *Tupper Lakes* (p. 118) cross Forked Lake (pron. 'Forkéd') to the N., pass through the outlet into (6 M.) *Little Forked Lake*, and thence proceed, by boat (2½ M.) and carries (5½ M.), viâ *Carey Pond*, *Bottle Pond*, and **Rock Pond*, to (8 M.) *Little Tupper Lake* (p. 118).

We turn to the right (E.) on Forked Lake and from its E. end descend through the picturesque *Raquette River* to (8 M.) Long Lake, about 2 M. of the route being the 'carries' required to pass the *Buttermilk Falls* and other unnavigable parts of the river.

Long Lake (1615 ft.), 14 M. long and ½-1 M. wide, is pretty, though tamer than many of the other lakes. To the right and left as we enter it are *Mt. Sabattis* (2780 ft.) and the *Owl's Head* (2825 ft.). On the right (E.) bank, about 2 M. below the head, is the *Deerland Lodge* ($ 3), a great hunting and fishing resort; and about 1 M. farther on, on the same side, is *Long Lake Village*, near which, on the lake, are the *Sagamore House* ($ 4) and *Long Lake House* ($ 2).

Nearly opposite Long Lake Village begins a boat and portage route to *Little Tupper Lake* (p. 118) viâ *Clear Pond*, *Little* and *Big Slim Ponds*, and *Stony Pond*. — Stage to *Blue Mt. Lake*, see above.

Farther on Long Lake expands. At its lower end (E. bank) is the small *Island House* ($ 2). To the right rises *Mt. Seward* (p. 115).

From Long Lake to *Upper Saranac Lake*, see pp. 108, 107.

Beyond Clearwater (p. 116) the train runs high up on the hillside, overlooking various small lakes to the right. About 2 M. to the E. of (63 M.) *Big Moose* lies *Big Moose Lake* (1800 ft.; Glenmore Hotel, Higby Camp, $ 2-3). We now reach the culminating point of the line (2050 ft.). 81 M. *Nehasane*, on *Lake Lila*, in the private park of Dr. Webb; 84 M. *Bog Lake*. From (88½ M.) *Long Lake West* (Wilderness Inn, $ 2½) stages run to (5 M.) Little Tupper Lake (see below) and (18 M.) Long Lake (p. 117). 93 M. *Horseshoe*, on *Horseshoe Lake*, the junction of a narrow-gauge railway used in the transport of maple sugar. — 100 M. *Childwold*, the station for (6 M.; coach $ 1) the **Hotel Childwold* ($ 4-5), on *Lake Massawepie* (1535 ft.). Farther on we cross the *Raquette River*.

108 M. *Tupper Lake Junction* is 1½ M. (stage) from *Tupper Lake Village* (Altamont, Iroquois, $ 2), the terminus of the New York & Ottawa R. R. (see below), situated on *Raquette Pond*, 2 M. below the foot of Tupper Lake (see below). In summer a steamer plies hence to the head of the lake, calling at the various hotels. The station is 9 M. from *Wawbeek Lodge* (p. 107), on Upper Saranac Lake

Tupper Lake (1555 ft.), 7 M. long and 3 M. wide, is surrounded by low but wild hills and is much frequented by sportsmen. It contains several islands. On the E. bank, near the N. end, are the *Waukesha* ($ 3) and *Prince Albert Hotels*. — From the head of Tupper Lake we may proceed by boat and portages to (4¼ M.) *Round Pond*, and cross this (2½ M.) by boat and carry to (1 M.) Little Tupper Lake. — Little Tupper Lake (1730 ft.) is 4 M. long and 1 M. wide. — From Little Tupper Lake to *Long Lake*, see p. 117; to *Raquette Lake*, see p. 117.

The line now passes several small lakes. — 122 M. *Saranac Inn Station*, 1¾ M. from Saranac Inn (p. 107; omn. 50 c.). From (125½ M.) *Lake Clear* (1½ M. from Rice's Lake Clear Hotel, p. 107) a branch-line runs to the right to (5 M.) *Saranac Lake* and (15 M.) *Lake Placid* (see p. 106), while a private line runs to the left (N.) to (5 M.) *Paul Smith's* (p. 106; fare 50 c.).

A stage also meets the morning-train (ca. 11 a.m.) for a round trip by road and lake (steamer) to Paul Smith's and back, allowing 2 hrs. at Paul Smith's and regaining the railway in time for the afternoon-trains (ca. 2 p.m.; inclusive fare $ 2).

To the left lies *Lake Clear* (p. 107). — 130 M. *Paul Smith's* is 4 M. from the *St. Regis Lake House* (see p. 107; stage). — To the left, at (133 M.) *Rainbow Lake Station* (Rainbow Lake Inn, $ 2½), we see *Rainbow Lake* (3 M. long; trout). 136 M. *Onchiota* (p. 106). 142 M. *Loon Lake Station* is 3½ M. from *Loon Lake House* (p. 106; stage). The line now parallels the Del. & Hudson R. R. (p. 106) for a time and then skirts the *Salmon River*. 154 M. *Mountain View* (hotel); 156½ M. *Owl's Head*.

167 M. **Malone** (*Howard*, $ 2-3), an industrial village with (1905) 6480 inhab., is a station on the Rutland R. R. from *Alburgh* and *Rouse's Point* to *Ogdensburg* (see p. 132). Hence to *Montreal*, see p. 129.

The *Tupper Lakes* and the *St. Regis Lake House* may also be reached by the *New York & Ottawa R. R.*, starting from *Moira* (p. 132), another station on the Rutland R. R. line to Ogdensburg, 14 M. to the W. of Malone.

e. From Saratoga to North Creek.

Schroon Lake.

58 M., Adirondack Branch of the Delaware & Hudson R. R. in 2 hrs. ($1.74; sleeping-cars from New York to North Creek without change $ 2 fare from Saratoga to *Blue Mt. Lake* $ 3³/₄).

Saratoga, see below. The train runs to the N., passing *Woodlawn Park* (p. 121; r.). Near (17 M.) *Corinth* we reach (r.) the *Hudson*, the pretty upper valley of which we follow. At (22 M.) *Hadley* we cross the *Sacondaga* (bridge 96 ft. high).

Hadley is the station for Luzerne (*Wayside Inn*, $ 3¹/₂-5), a pleasant summer-resort beyond the Hudson, on the pretty little *Lake of Luzerne*.

The wooded sugarloaf hill to the right, beyond Hadley, is known as the *Potash Kettle* (1735 ft.). The valley contracts, and the hills are prettily wooded. — 50 M. *Riverside* (883 ft.) is the starting-point of the stage-coaches for (7 M.) *Schroon Lake* and (12 M.) *Brant Lake* (see below).

The Schroon Lake coaches run viâ (6 M.) *Pottersville* to the landing at the lower end of the lake, whence a small steamer plies to the hotels at its (9 M.) head (fare from Riverside $ 2), touching at the *Watch Rock Hotel* ($ 3¹/₂), on the E. shore, the *Taylor House* ($ 2¹/₂-3), on the W. shore, and other points. Schroon Lake (807 ft.), 10 M. long and 1-2 M. wide, is surrounded by rugged hills and affords good fishing. Near its head lies the village of *Schroon Lake*, with numerous hotels, the largest of which are the *Leland House* ($ 4-5), the *Ondawa* ($ 2), and the *Windsor* ($ 2). The road (stages) to the N. runs hence viâ (4 M.) the beautiful *Paradox Lake* (820 ft.) and *Schroon River Post Office* (p. 110) to (22 M.) *Euba Mills* (p. 110), where it forks, one branch going to (6 M.) *Keene Valley* (p. 111), the other to (10 M.) *Elizabethtown* (p. 109). — *Brant Lake* (The Palisades, The Pebloe, $ 2), to the S.E. of Schroon Lake, is smaller and also picturesque.

58 M. **North Creek** (1002 ft.; *Adirondack Hotel*, $ 2-3; *Straight Ho.*, $ 2) is the terminus of the railway and the starting-point of the coaches to Blue Mt. Lake.

From North Creek to Blue Mountain Lake, 30 M., coach in 6¹/₂ hrs. (fare $ 2). This is not a very attractive drive, especially as the road is bad and passes through an extensive 'burnt district'. — To the left rises *Gore Mt.* (3595 ft.). 5 M. *North River Hotel* (D. 25-75 c.). The road now quits the Hudson and ascends rapidly. *Mt. Marcy* (p. 114) may be seen in the distance to the right. We cross (17 M.) *Indian River* (poor inn). 18 M. *Indian Lake Post Office* (inn); 20 M. *Cedar River* (Hotel, $ 2). We cross the watershed (1760 ft.) between the Hudson and the *Raquette* (p. 117). — 29 M. *Blue Mountain Lake* (see p. 117).

9. Saratoga.

Railway Stations. *Delaware and Hudson Station*, Division St., near the back of the U. S. Hotel, for New York, Albany, the Adirondacks, etc.; *Boston & Maine R. R. Station*, Henry St., for Saratoga Lake, Boston, etc.

Hotels. United States Hotel, Broadway, cor. Division St., an enormous structure 300 yds. long, with 1000 beds, $ 5; Grand Union, occupying the square between Broadway, Congress, Federal, and Washington Sts., and enclosing a large tree-shaded court, with 2400 ft. of street-front and 1500 beds, from $ 4; Congress Hall, Broadway, between Spring St. and E. Congress St., with 1000 beds, from $ 4; Windsor, Broadway, cor. E. William St., a fashionable house, from $ 4; Kensington, with cottages,

$ 4; Worden, Broadway, cor. Division St., $ 3, open all the year round; American-Adelphi, next door to the U. S. Hotel, $ 3-3½; Columbian, $ 3; Excelsior Spring Hotel, Excelsior Park, $ 3; White Sulphur Springs Hotel ($ 2½-3); Huestis ($ 3), Linwood ($ 2½-3), and many other small hotels and boarding-houses, at all prices.

Post Office, in the *Arcade*, opposite the U. S. Hotel.

Horse Races in July and Aug. at the *Race Course*, Union Avenue. — Golf Tournament in August.

Saratoga Springs (277 ft.), a noted inland watering-place, is situated on a level and monotonous plateau near the E. edge of the State of New York, 180 M. to the N. of the city of New York and 12 M. to the W. of the Hudson. The famous saline mineral springs are about 30 in number (see below and p. 121). The permanent population of the town is about 13,000, but in the height of the season (July and Aug.) this is often more than quadrupled.

The name is supposed to be derived from Indian words meaning 'place of the swift water'. The springs were known to the Indians for centuries, and *Jacques Cartier* heard of their virtues in 1535. The first white man to use them is believed to have been *Sir William Johnson* (p. 130), the adopted sachem of the Mohawks, who was brought hither by these Indians in 1767 and recovered his health by drinking the High Rock Spring (p. 121). Hotels and boarding-houses began to be erected early in the 19th century, and since then the progress of the place has been very rapid, in spite of its want of fine scenery or commercial advantages. The show of material wealth at Saratoga during July or Aug. is not without effect, but it does not compete with either Newport (p. 248) or Lenox (p. 340) in refinement of luxury. Saratoga is also a popular place for 'conventions' of politicians, lawyers, bankers, veterans, etc. — The battle of Saratoga (Oct., 1777), resulting in the surrender of Sir John Burgoyne to the Americans, was fought some distance to the S. of the Springs (see p. 122).

The Hotels of Saratoga afford accommodation for about 20,000 visitors. The two at the head of the list are among the largest hotels in the world; and a visit to their enormous ball-rooms, dining-rooms, and piazzas should not be omitted. The dining-room of the Grand Union is 275 ft. long.

Most of the Springs lie in a shallow valley stretching to the N.E. from Broadway (see below), and rise through a fault in the underlying rock, the S. strata being tilted above those to the N. Some are chalybeate, others contain iodine or sulphur, and all are strongly impregnated with carbonic acid gas. Their temperature is usually 46-50° and most of them are pleasant to drink. They are both tonic and cathartic in working, and are considered efficacious in dyspepsia, liver complaints, calculus, rheumatism, etc. They should not be too freely indulged in without medical advice. A charge of 5 c. is made at almost all the spring-houses.

Broadway, the principal street of Saratoga, containing the chief hotels, the best shops, and the finest private residences, runs N. and S. for a distance of 3 M. and is shaded by fine elms. Most of the springs are in or near it. Proceeding to the right (S.) from the *U. S. Hotel* we soon reach, to the left, Spring St., just to the N. of *Congress Hall* (p. 119), with the *Hathorn Spring*, a saline spring containing bicarbonate of lithia. To the S. of Congress Hall is **Congress Spring Park** (adm. 5 c.), with a small deer-paddock. Near the entrance are *Congress Spring* (saline, with magnesia; resembling the Kissingen Rakoczy) and *Columbian Spring* (chalybeate), the former the most widely known of the Saratoga waters.

A band plays in the park thrice daily, and Sunday and other concerts are given. — Behind Congress Hall is the *Hamilton Spring* (similar to the Columbian), and a little to the N., in Philadelphia St., are the handsome *Saratoga Baths* (Turkish, Russian, and other baths) and the *Patterson Spring* (cathartic). Continuing to follow Broadway towards the S., we reach (left) the *Convention Hall*, erected for the conventions mentioned at p. 120 (5000 seats). Adjacent is the *Pompeia* (adm. 25 c.; closed on Sun.), a reproduction of the House of Pansa at Pompeii (destroyed A. D. 79), erected by Mr. Franklin W. Smith (comp. p. 617). *Washington Spring* rises opposite. — Ballston Avenue, a little farther on, leads to the right, passing an *Indian Camp* (baskets, etc., for sale), to (1¼ M.) *Geyser Park* and *Lake*, with the *Geyser* or *Spouting Spring* (rising from a depth of 132 ft.). The *Saratoga Vichy*, the *Saratoga Kissingen* (both alkaline), the *Champion Spouting Spring*, the *Carlsbad Spring* (saline and cathartic), the *Adirondack*, and the *Lafayette Spring* (cathartic) are in the same neighbourhood.

Following North Broadway to the left (N.) from the U. S. Hotel, we pass the *Town Hall* (right) and reach a part of the street lined with handsome private residences. At (¾ M.) *Third Street* we turn to the left and reach the entrance to **Woodlawn Park** (1200 acres).

The park is traversed by walks and drives in all directions. The trimmer part near the houses, ornamented with dubious statuary, is less attractive than the wilder part, to the N. Views are obtained of the Catskills (S.), the Green Mts. (E.), and the foothills of the Adirondacks (N.). — We may continue our walk through the park to (2½ M.) *Glen Mitchell*, with a Roman Catholic college, and return by Broadway.

Returning along Broadway, we turn to the left at Rock St., cross the railway, and reach a group of springs in *Spring Avenue*.

The *High Rock Spring*, the earliest known (comp. p. 120), bubbles from a conical rock, 3½ ft. high, formed by its deposits. Below is the *Star Spring*. To the S. are the *Seltzer Spring*, the *Magnetic Spring* (baths), the *Flat Rock* or *Imperial Spring* (behind the Town Hall), the *Pavilion Spring*, and the *Royal Spring* (600 ft. deep). To the N. are the *Empire Spring*, the *Red Spring* and *Bath House* (with a large proportion of iron; useful for affections of the skin), and the *Saratoga 'A' Spring*.

Following Spring Avenue towards the N.E., we reach (¾ M.) the *Excelsior Spring Hotel* (p. 120; left), opposite which is the entrance to the *Excelsior Spring and Bottling Works*, prettily situated in *Excelsior Park*, near which is the *Union Spring*. — About ¼ M. to the E. are the *White Sulphur Spring* (hotel, p. 120; baths) and *Eureka Spring*. — We may now return towards Broadway through the patch of woodland to the S.W. of the Excelsior Spring, emerging (10 min.) upon *East Avenue*. Here we turn to the left and then follow *Lake Avenue* (right), past the *Armoury*, the *Academy*, and the *Boston & Maine Railroad Station*, to (6 min.) Broadway. — The *Lincoln Spring*, 1 M. from Monument Square, is highly effervescent.

Environs. The favourite short *Drive* from Saratoga is that to *Saratoga Lake, 4 M. to the S.E. We follow *Union Avenue*, which leads to the left from Broadway at Congress Hall. On the left we pass another

Indian Camp and on the right the *Racecourse*, one of the best tracks in the United States, and *Yaddo*, the residence of Mr. Spencer Trask, to the beautiful grounds of which visitors are admitted. The lake, on which small steamers ply, is 7 M. long and is frequented for boating and fishing. Near its N. end is the *Lake House* (formerly *Moon's*), a favourite resort for game and fish dinners and for 'Saratoga Chips' (fried potatoes; sold in paper packets or served with meals). An electric tramway (fare 10 c.) runs from near the Grand Union Hotel to Saratoga Lake. Adjoining the lake is *Kaydeross Park*. — *Gridley's Ponds*, a fishing-preserve near the racecourse, are much frequented by ladies and others (fee $ 1 per pound of trout caught). — One of the most popular drives from Saratoga is that to (10 M.) the top of Mt. McGregor (1200 ft.), which commands an exquisite *View, and is surmounted by the cottage in which *Gen. Ulysses Grant* died in 1885 (now State property and shown to the public). — *Ballston Spa* (7 M.; p. 127), *Round Lake* (12 M.), and *Lake Luzerne* (see p. 119; 20 M.) may be reached by road or railway; and longer excursions may be made to the *Adirondacks* (p. 104), *Lake George* (see below), *Lake Champlain* (p. 124), etc.

A branch of the B. & M. Railroad runs to (12 M.) *Schuylerville* (Hot. Schuyler, $ 2), whence the *Battlefield of Saratoga* (p. 120), with its monument, may be visited. Memorial tablets mark the chief points of the battle-ground, and there is a collection of relics in the Schuyler Mansion Museum.

10. Lake George and Lake Champlain.

Comp. Maps, pp. 104, 232.

*Lake George (323 ft.), a picturesque sheet of water in the State of New York, to the S.E. of the Adirondack Mts. (p. 104), is 33 M. long from N. to S. and 3/4-3 M. wide. It is flanked on both sides by wooded mountains, sometimes descending to the water in bold crags, and is dotted with pretty islands (220 in all). It is sometimes called, perhaps with more zeal than discretion, the Como, the Windermere, or the Loch Lomond of America. At the N. end it discharges into Lake Champlain, 225 ft. below it, from which it is separated by a ridge 4 M. wide.

Lake George has long been a favourite summer-resort, and there are many hotels on its banks, while camp-life is also in high favour. It is usually approached by the route to *Lake George Station* described at p. 127; and a steamer plies twice daily thence in 2-2½-3 hrs. to *Baldwin*, at the foot of the lake (fare $ 1.50; restaurant on board, meals $ ¾-1). Fair fishing for lake-trout, perch, and bass is obtained in the lake (boat with fisherman $ 3 a day). — See *S. R. Stoddard's* 'Lake George and Lake Champlain' (25 c.); and comp. *Francis Parkman's* 'Historic Handbook of the Northern Tour'.

Lake George was first seen by white men in 1642, when three Frenchmen, including the Jesuit Jogues, were brought hither as captives of the Iroquois. Father Jogues named it the *Lac du Saint Sacrement;* the Indian name was *Andiatarocte* ('place where the lake closes'), and Cooper tried in vain to attach to it the romantic title of *Lake Horican* ('silvery waters'). The present name was given to it in honour of George II. The position of Lake George on the highway between the English colonies and Canada gave it a prominent rôle in the Anglo-French struggles of the 17-18th cent., and more than one battle has been fought on or near its waters (comp. pp. 123, 124). Its associations with the romances of Cooper lend it an additional interest.

Lake George, formerly called *Caldwell* (*Fort William Henry Hotel*, a large house with 800 beds, from $ 4; *Lake George Inn*,

$ 2½-3; *Worden*, $ 2½-3; *Fernwood*, *Arlington*, $ 2), the terminus of the railway mentioned at p. 127, is a small village, beautifully situated at the head (S. end) of Lake George, and much frequented as a summer-resort (good boating and fishing). It lies at the E. base of *Prospect Mt.* (2020 ft.; Prospect Mt. Ho.), which is ascended by an inclined railway (disused at present). To the E. rises *French Mt.* (1522 ft.).

The Fort William Henry Hotel stands near the site of the old *Fort William Henry*, built by the English in 1755 to command the head of the lake. Two years later it was captured by General Montcalm at the head of 8000 men; and the massacre of 1500 helpless men, women, and children by his Indian allies has left an indelible stain on the memory of that gallant Frenchman (see the descriptions in *Cooper's* 'Last of the Mohicans' and in *Parkman*). A few relics of the fort subsist. — About ½ M. to the E. are the picturesque ruins of *Fort George*, dating from 1759. — It was at this spot that the army of Gen. Abercrombie started in a fleet of boats for its disastrous expedition against Fort Ticonderoga (1758; see *Cooper's* 'Satanstoe'), and a year later Lord Amherst set out hence with the army that finally expelled the French from Lakes George and Champlain.

The Steamer down the lake leaves Lake George station after touching at various hotel-landings and steers towards the N. On the right bank are *St. Mary's Convent*, the summer-retreat of the Paulist Fathers of New York, and Joshua's Rock. We pass the small *Tea Island* and *Diamond Island* and make our first stop at (4½ M.) *Assembly Point*, projecting towards *Long Island*. On the opposite (left) bank is the *Antlers Hotel* ($ 2½).

6 M. *Cleverdale* (Horicon Lodge, $ 2) is the first of several stops in *Kattskill Bay* at hotels frequented by anglers ($ 2-2½). — 9 M. *Westside* (Marion Ho., $ 2½-4; Agawam), on the W. bank. — 12 M. *Victoria Lodge*, at the foot of Pilot Knob (2080 ft.) on the E. bank.

To the right rises *Buck Mt.* (2334 ft.). — The steamer steers between *Dome Island* (r.), in the widest part of the lake, and *Recluse Island* (l.), connected by a bridge with the tiny *Sloop Island*.

14½ M. (l.) **Bolton** (**Sagamore*, situated on an island connected with the mainland by a bridge, from $ 5; *Algonquin*, *Lake View Ho.*, $ 2-3), a large village, is a good centre for excursions. Black Mt. (see below) stands out well to the E.N.E. Above Bolton extends *Ganouskie* or *North West Bay*, 5 M. long, formed by a tongue of land jutting out southwardly into the middle of the lake.

17 M. (r.) *Pearl Point House* ($ 3), at the foot of **Shelving Rock Mt.** (1135 ft.), descending abruptly into the lake.

Off the shore is *Fourteen Mile Island*, at the entrance to the ***Narrows**, between *Tongue Mt.*, *Three Mile Mt.*, and *Five Mile Mt.* (2258 ft.) to the left, and *Mt. Erebus* (2533 ft.) and the sombre *Black Mt.* (2665 ft.; *View) to the right. The Narrows are crowded with islands, through which the steamboat holds a devious course.

19 M. (r.) *Paradise Bay*, a favourite goal of excursions.

23 M. *Harbor Islands*, where a body of 400 English were surprised by the Indians in 1757 and nearly all killed or captured. To

the left are *Deer's Leap Mt.* and *Bloomer Mt.* (1785 ft.) forming the *Twin Mts.*, as seen from the N.

24 M. (r.) *Hulett's Landing* (Hotel, $ 2½), whence Black Mt. is ascended from the N.

26 M. (l.) ***Sabbath Day Point** (*Hotel*, $ 1½), a fertile cape at the outlet of the Narrows, was the scene of a battle between the Colonists and the Indians and French in 1756 and between the Americans and the Indians in 1776, in both of which the first-named won. Generals Abercrombie and Amherst (see p. 123) both landed here. Good view up and down the lake.

27 M. (l.) *Uncas* (Hotel, $ 2-2½). — 28 M. (l.) *Silver Bay* (Silver Bay Ho.).

32 M. (l.) **Hague** (*Phoenix Hotel*, $ 2-2½; *Hillside Ho.*, *Rising Ho.*, *Trout Ho.*, $ 2), a favourite fishing-resort, backed by the ridge of the *Three Brothers*. — The lake again contracts. To the right is *Anthony's Nose*, rising abruptly from the water's edge.

37 M. (l.) *Rogers Slide* (1078 ft.) and **Rogers Rock Hotel* ($ 3-4).

38 M. (l.) **Baldwin** (*Baldwin Ho.*, $ 2), where we leave the steamer for the train. *Lord Howe's Point*, just to the N., was the landing-place of the English army in 1758. Offshore lies *Prisoners' Island*, where the French are said to have confined their captives.

From Baldwin to Fort Ticonderoga, 5 M., railway in ¼ hr. (fare 75 c.). This short railway, connecting Lake George with Lake Champlain, descends rapidly (245 ft.) round the slope of *Mt. Defiance* (p. 125). At the village of *Ticonderoga* (Burleigh Ho., $ 2-2½; Exchange Ho., $ 1½-2), about halfway, the outlet of Lake George forms a picturesque waterfall (left). — *Fort Ticonderoga*, see p. 125.

***Lake Champlain** (96 ft.), 118 M. in length, ¼-12 M. in width, and 50-400 ft. deep, lies between New York on the W. and Vermont on the E. and extends on the N. for a short way into Canada. Its shore-line is indented by numerous bays and inlets, and there are about fifty islands, one of which is 30 sq. M. in extent. The Vermont shore is generally level and fertile, with the Green Mts. in the background, while the W. shore is broken and diversified by the foothills of the Adirondacks. A considerable navigation is carried on on its waters, and it communicates with the Hudson by a canal and with the St. Lawrence by the river Richelieu.

The name of the lake recalls Samuel de Champlain, Governor of Canada, who discovered it in 1609. Its Indian names were *Caniaderi Quaranti* ('gate of the land') and *Petoubouque* ('waters that lie between'). Like Lake George, it was for a century and a half the scene of repeated conflicts between the English and the French; and in 1759 it finally passed into the possession of the former.

Steamboats (good restaurants on board) ply regularly from *Fort Ticonderoga* (p. 125) to *Plattsburg* (p. 128; 5⅔ hrs.; fare $ 2.05), calling at all important intermediate points; from *Westport* (p. 109) to *Burlington* (p. 311), *Plattsburg, South* and *North Hero* (p. 311), and *St. Alban's Bay* (p. 126; 6 hrs.); from *Burlington* to *St. Alban's Bay* (4½ hrs.); and from *Westport*

to *Vergennes* (p. 311). — For the RAILWAYS along the banks of the lake and across the islands, see RR. 11, 42.

The S. extremity of Lake Champlain, from *Whitehall* (p. 127) to (24 M.) *Fort Ticonderoga*, is so narrow as to resemble a river rather than a lake, and is described at p. 127. Steamboat-navigation begins at Fort Ticonderoga.

Fort Ticonderoga (*Fort Ti. Hotel*, near the old fort, $ 2) is a railway-station and steamboat-landing on the W. side of Lake Champlain, at the foot of *Mt. Defiance* (850 ft.; *View). The village of *Ticonderoga* (p. 124) lies 2 M. inland, while the ruins of *Fort Ticonderoga* (see below) crown a high bluff 1½ M. to the N.

Fort Carillon, the first regular fortification here, was built by the French in 1755. In 1758 General Abercrombie (see p. 123) made an unsuccessful effort to capture it, and had to retreat up Lake George, with the loss of Lord Howe and 2000 men. The following year, however, the French evacuated it on the approach of Lord Amherst (see p. 123), and the English considerably strengthened and enlarged it, changing its name to **Fort Ticonderoga**. In 1775 the fort was taken by Green Mountain Boys led by Col. Ethan Allen of Vermont (comp. p. 311), who surprised the unsuspecting commandant in his bed and called on him to surrender 'in the name of the Great Jehovah and the Continental Congress'. Gen. Burgoyne, however, recaptured it in 1777 with the aid of a battery posted on the top of Mt. Defiance. The fort was dismantled in 1780 and allowed to fall into decay. It long formed a quarry for the buildings of the neighbourhood; but its scanty remains, from which a fine view is obtained, are now preserved as a national memorial.

At Fort Ticonderoga the lake is barely ½ M. wide, and it does not widen materially till beyond Crown Point. The STEAMER makes its first stop at *Larrabee's Point* (right; Lake Ho., 2½-3½) and then crosses the lake to (10 M.) the landing of *Crown Point* (left; Lake Ho., $ 2), 1 M. to the E. of the village. A short railway runs to (13 M.) *Hammondville*, connecting by stage with *Schroon Lake* (p. 119). About 5½ M. farther on we thread the narrows between *Chimney Point*, on the right, and ***Crown Point**, on the left, the latter surmounted by a lighthouse and the ramparts of the old fort.

The French *Fort Frederick*, erected on this point in 1731, was abandoned at the same time as Fort Ticonderoga (see above). The English constructed a much larger and more formidable fortification, which, like Ft. Ticonderoga, was taken by Ethan Allen in 1775 and by Burgoyne in 1777.

Beyond the narrows the lake widens to 2 M. Behind Crown Point is *Bulwagga Bay*, the shore of which is, perhaps, the point where Champlain fought with the Iroquois in 1609.

18 M. (l.) *Port Henry*, a prettily situated village, whence a railroad runs to (7 M.) *Mineville*, 19 M. from *Schroon River Post Office* (p. 119). At *Chimney Point*, opposite Port Henry (steam-ferry), is the *Fort St. Frederic Inn* ($ 2-3). A fine view of Dix Mt. (p. 114) and other Adirondack peaks is now obtained to the left.

29 M. (l.) **Westport**, in *North West Bay*, one of the approaches to the Adirondacks (see p. 109). — Farther on ***Split Rock Mt.** (1035 ft.; lighthouse) rises to the left, while opposite is the mouth of the *Otter Creek*.

43 M. (l.) *Essex* (Essex Inn, $ 2). The steamer soon enters the

widest part of the lake and steers to the N.E., passing the *Four Brothers* and *Juniper Island* (lighthouse). To the left lies *Willsboro Point.*

57 M. (r.) **Burlington** (steamer-landing 1/3 M. from railway-station; see p. 311). Fine view of the city. — From Burlington the steamer runs nearly straight across the lake to —

70 M. (l.) **Port Kent** (*Trembleau Hall*, $2½; *Lake Side Ho.*, $ 2-2½; **Douglass*, on Douglass Bay, 4 M. to the S., $2½), the station for the Ausable Chasm (see p. 108). The *Ausable River* enters the lake 2½ M. farther on.

76 M. (l.) *Valcour*, on the narrow channel between the mainland and *Valcour Island*, where a hotly contested naval battle took place between Arnold and Pringle in 1776, resulting in the destruction of the American fleet.

Beyond this point the lake is divided into two branches by the large islands of *Grand Isle* or *South Hero* (30 sq. M.) and *North Hero* and the promontory of *Alburgh* (railway-route over the islands, see pp. 311, 312). Our steamer follows the left (W.) arm. On (79 M.) *Bluff Point* (l.), 3 M. beyond Valcour, stands the luxurious and magnificently situated **Hotel Champlain* (200 ft.; from $ 5), commanding views of the Adirondacks, Lake Champlain, and the Green Mts. Its grounds, 450 acres in extent, include a golf-course.

83 M. (l.) **Plattsburg** (p. 128), in *Cumberland Bay*, one of the main gateways to the Adirondacks.

In 1814 Cumberland Bay was the scene of the *Battle of Plattsburg*, in which Commodore Macdonough defeated the British fleet under Commodore Downie. At the same time Gen. Macomb, in command of the land-forces, repelled Sir George Prevost's attempt to capture Plattsburg. The Isle St. Michel has been laid out as the Macdonough National Park.

Plattsburg is the terminus of the steamer route from Fort Ticonderoga, but the Westport steamer (comp p. 124) ascends to *St. Alban's Bay* (p. 315), touching at various landings on the islands. The fishing at this end of the lake is exellent, and accommodation may be had at various small hotels, farm-houses, and camps.

11. From New York to Montreal viâ Valley of the Hudson.

Comp. also R. 47.

a. Viâ Albany (or Troy), Saratoga, and Lake Champlain.

384 M. New York Central & Hudson River Railroad to (143 M.) *Albany* in 2¾-4 hrs.; Delaware & Hudson Railroad thence to (241 M.) *Montreal* in 7¼-8¾ hrs. (through-express in 10¾-12 hrs.; through-fare $ 10.30, parlor-car $ 2, sleeper $ 2; best views to the left as far as Albany, then to the right).

This is the shortest and most direct route from New York to Montreal, Lake George, and Lake Champlain. Those who have not seen the *Hudson* should go by Steamer to Albany (see p. 81); and they may also leave the train for the steamer on *Lakes George* and *Champlain.*

From New York to (143 M.) *Albany*, see R. 4b. Beyond Albany we follow the tracks of the *Delaware and Hudson Railroad*, which

traverses a very interesting district, skirting *Lake George* (p. 122), *Lake Champlain* (p. 124), and the *Adirondack Mts.* (p. 104). — The line passes the *Rural Cemetery* and reaches (150 M.) *Watervliet*, with a large United States Arsenal, situated on the Hudson, opposite *Troy* (p. 128). — 152 M. **Cohoes** (*Harmony*, $2-2^1/_2$), a prosperous manufacturing city with (1905) 24,183 inhab. and the huge *Harmony Cotton Mills* (6650 looms, 2800 operatives), is situated at the **Falls of the Mohawk River* (75 ft. high, 900 ft. wide), which the train crosses here by a long bridge (view of falls to the left). — At (154 M.) *Waterford Junction* the Albany division unites with the main line coming from (6 M.) *Troy* (p. 129). — At (159 M.) *Mechanicville* (comp. p. 335) we turn to the N.W. (left) and quit the Hudson. 165 M. *Round Lake* (Wentworth, $2^1/_2$-3). — 175 M. *Ballston Spa* (Lincoln, Eagle, Medberry, $2), with mineral springs, is the junction of a line to *Schenectady* (p. 129) and *Binghamton* (p. 141).

180 M. **Saratoga** *(Rail. Restaurant)*, see p. 119.

Beyond Saratoga the train runs to the N.E. and crosses the Hudson at (197 M.) *Fort Edward*, where, however, all traces of the fort, built in 1755, have disappeared. Passengers for the Lake George steamer diverge here (see below).

From Fort Edward to Lake George Station *(Caldwell)*, 14 M., railway in $^3/_4$-1 hr. The line ascends the Hudson, which here makes numerous falls. — 5 M. **Glens Falls** (343 ft.; *Rockwell Ho.*, $2^1/_2$-$3^1/_2$; *Ruliff*, $2), an industrial city with (1905) 14,650 inhab., where the Hudson forms a picturesque *Fall (50-60 ft.). The island below the fall is the scene of some well-known incidents in *Cooper's* 'Last of the Mohicans'. — Beyond Glens Falls the train passes *Glen Lake* (r.), reaches a height of 575 ft., and then descends rapidly through a wooded defile, affording fine views of lake and mountain. To the left, 2 M. from the village of Lake George, is the *Williams Rock*, a boulder marking the spot where Col. Ephraim Williams (founder of Williams College, p. 343) was killed and his 1200 men were defeated by the French and Indian army of Dieskau, which was in turn defeated, also with the loss of its commander, by Sir Wm. Johnson (Sept. 8th, 1755). Hard by, just to the left of the railway, is the *Bloody Pond*, into which the dead bodies were thrown. — 14 M. **Lake George Station** (331 ft.), see p. 122.

Beyond Fort Edward our train leaves the Hudson and descends the valley of *Wood Creek*. 209 M. *Fort Ann*, the site of a fort of 1757, near which Gen. Putnam was defeated and captured by the French and Indians in 1750. — 219 M. **Whitehall** (*Hall Ho.*, $2), the junction of a line to *Rutland* (p. 310), is a lumbering village of (1905) 4198 inhab., situated at the foot of *Skene Mt.* (525 ft.) and at the S. extremity of *Lake Champlain* (p. 124).

The train crosses the *South Bay* and follows the W. bank of Lake Champlain, which is at first more like a river than a lake. — 241 M. *Fort Ticonderoga* (see p. 125) is the junction of a line to (5 M.) *Baldwin* (p. 124), on Lake George, and the starting-point of the steamer on Lake Champlain to *Plattsburg*, etc. (see p. 124). — The train threads a tunnel. 243 M. *Addison Junction*, for a line to *Leicester* and *Rutland* (p. 310); 251 M. *Crown Point* (p. 125); 259 M. *Port Henry* (p. 125). The *Adirondack Mts.* now rise pro-

minently to the left. From (270 M.) *Westport* (p. 109) coaches run to *Elizabethtown*, *Keene Valley*, and *Lake Placid* (see p. 109). The train passes behind *Split Rock Mt.* (p. 125; right) and emerges on the wider part of Lake Champlain (views). The rocks to the left rise precipitously. — 284 M. *Willsboro.* — 298 M. *Port Kent* (p. 126), the junction of a line to (2¾ M.) *Ausable Chasm* (p. 108) and (6 M.) *Keeseville* (p. 108). — 306 M. *Hotel Champlain* and *Bluff Point* (see p. 126).

309 M. **Plattsburg** (120 ft.; *Fouquet Ho.*, from $ 3; *Witherill*, *New Cumberland*, $ 2½-3½; **Rail. Restaurant*, meals 75 c.), a small town with (1905) 10,184 inhab., is pleasantly situated on the W. shore of *Lake Champlain* (comp. p. 126), at the mouth of the *Saranac River*. It is a convenient starting-point for excursions on the lake, and it is the junction of branch-railways to *Ausable Forks* and *Saranac Lake* (see p. 106). It is 9½ hrs. from New York by express-train. The *U. S. Military Post* at Plattsburg consists of 12 companies and is one of the largest and most important in the country (dress parades, guard-mounts, etc.). About 2 M. to the S., adjoining the grounds of the Hotel Champlain (p. 126), is *Cliff Haven*, the headquarters of the *Roman Catholic Summer School of America*, corresponding in organization and importance to the Protestant gathering at Chautauqua (p. 232). The attendance is very large. The reading circles of several states have small hotels or club-houses of their own.

From Plattsburg to Ausable Forks, 23 M., railway in ¾-1½ hr. (fare 72 c.). — The line runs to the S.W. through the valley of the *Little Ausable*. From (23 M.) *Ausable Forks* (American Ho., $ 2) coaches run to *Wilmington* (p. 111; $ 1) and *Lake Placid* (p. 110; $ 2½).

Our line now leaves Lake Champlain and traverses a somewhat monotonous district. 319 M. *West Chazy.* — 334 M. *Rouse's Point* (Windsor, $ 2½-3), at the N. end of Lake Champlain, is the frontier-station. We then descend along the left bank of the *Richelieu* to (357 M.) *St. John's* (p. 312). Hence to —

384 M. **Montreal**, see *Baedeker's Canada.*

b. Viâ Troy, Rutland, and Burlington.

397 M. New York Central & Hudson River Railroad to (149 M.) *Troy* in 4-5 hrs.; Boston & Maine R. R. thence to (30 M.) *White Creek* in 1⅓ hr.; Rutland R. R. thence to (188 M.) *St. John's* in 6½ hrs.; Canadian Pacific Railway thence to (30 M.) *Montreal* in ¾ hr. (through-trains in 12½-13 hrs.; fares as at p. 126). — This line is the direct route from New York to *Burlington* (p. 311) and the *Green Mts.* (p. 315).

From New York to (142 M.) *Rensselaer*, see R. 4b.

149 M. **Troy** (*Rensselaer*, R. from $ 1; *Fifth Avenue*, *Mansion Ho.*, $ 2-2½; *Windsor*, R. from $ 1), a busy industrial city of (1905) 76,910 inhab., at the head of the steam-navigation of the Hudson. Its chief products are iron, Bessemer steel, railway rolling-stock, cotton and woollen goods, collars, and shirts. The *Rensselaer Polytechnic Institute* is a celebrated engineering school. The *Music Hall*, *Post Office*, and *Court House* are among the most prominent

buildings. The fine *Public Library* contains a statue of *Miss Emma Willard* (1787-1870), after whom the large *Emma Willard Seminary* is named. The *Soldiers' & Sailors' Monument* is in Washington Square. Troy is famous for its laundries.

Troy is an important railway-centre, lines diverging in all directions (New York; Burlington and Montreal; Boston viâ the Hoosac Tunnel, etc.). The main line of the Del. & Hudson R. R. begins here and unites with the Albany division at *Waterford Junction* (p. 127).

Our train turns to the right (N.E.) and runs over the *B. & M. R. R.* to (179 M.) *White Creek*. 181 M. *North Bennington*, the junction for (5 M.) *Bennington* (Putnam, from $ 2½; Wallomsac, 1 M. from station, $ 2½-3½). We then run towards the N., with the *Green Mts.* at some distance to the right. 202 M. *Manchester* (690 ft.; Equinox Ho., $ 4), a summer-resort at the base of *Mt. Equinox* (3816 ft.), the *View from which includes the Catskills, the Berkshire Hills, Lake George, and Lake Champlain.

234 M. *Rutland* (Rail. Restaurant), and thence to —

397 M. **Montreal**, see R. 42a.

c. Viâ Utica and the Adirondacks.

470 M. New York Central & Hudson River Railroad in 12½-15 hrs. (fares as in R. 11b). This route crosses the *Adirondacks* (comp. p. 115), and forms the most convenient approach to many points in that district.

From *New York* to (238 M.) *Utica*, see R. 12a; from Utica to (405 M.) *Malone*, see R. 8d. The train here crosses the Rutland R. R. (from Ogdensburg to Rouse's Point and Alburgh; comp. p. 312) and continues to run towards the N. Beyond (413 M.) *Constable* we enter Canada. 419 M. *Athelstan;* 423 M. *Huntingdon*. At (435 M.) *Valleyfield* we reach the *St. Lawrence*, along the S. bank of which we now run to the right. 448 M. *Beauharnois;* 456 M. *Chateaugay*. At (461 M.) *Adirondack Junction* we connect with the C. P. R.

470 M. **Montreal**, see *Baedeker's Canada*.

12. From New York to Buffalo and Niagara Falls.

a. Viâ New York Central and Hudson River Railroad.

Comp. Map, p. 232.

462 M. Railway to (440 M.) *Buffalo* in 8¾-14½ hrs. (fare $ 9.25; sleeper $ 2; parlor-car $ 2); to (462 M.; 450 M. by direct route, see p. 135) *Niagara Falls* in 9¼-15½ hrs. (fares the same). Seats to the left. The 'Empire State Express', leaving New York at 8.30 a.m., runs at the rate of over 50 M. an hour, including stops.

From *New York* to (143 M.) *Albany*, see pp. 86-91. The train now turns to the left (W.) and leaves the *Hudson*. 146 M. *West Albany*.

160 M. **Schenectady** (245 ft.; *Edison*, $ 2-4; *Vendome*, $ 2-2½; *Crown*, *Mohawk*, R. from $ 1), a prosperous industrial town of Dutch foundation, situated on the right bank of the *Mohawk*, with various manufactories and a trade in agricultural produce. Pop. (1905)

58,387. It was the scene of two horrible massacres in the Colonial wars. *Union College* (1795) stands to the E. of the city. To the left we see the vast plant of the *General Electric Co.* (15,000 employees). The *American Locomotive Co.* (8000 hands) turns out some of the largest and fastest locomotives in the world. — At Schenectady we intersect the Del. & Hudson R. R. (N. to Saratoga, S. to Binghamton; comp. p. 141).

The train now crosses the river and the *Erie Canal* (Union College to the right) and ascends the smiling pastoral **Valley of the Mohawk*, formerly the stamping-ground of the Indian tribe of that name (see below). Evidences of rustic comfort and fertility abound on every side. The Catskills are visible in the distance to the S., and the outliers of the Adirondacks appear to the N. The Shakers have several settlements in the lower vlley.

176 M. *Amsterdam* (280 ft.), an industrial city of (1905) 23,943 inhabitants. To the left we see the shrine at *Auriesville* (p. 139), marking the spot where Father Jogues (p. 122) was killed in 1646 (view). 182 M. *Tribes Hill*, an old meeting-place of the Indians. — From (187 M.) *Fonda* a branch runs to (26 M.) *Northville.*

Johnstown (Kolaneka, $ 2-3), on this railway, 3 M. to the N., was the residence of *Sir William Johnson* (d. 1774; comp. p. 120), one of the pioneers of the valley, who acquired great influence with the Mohawks and was made one of their sachems. He was created a baronet for his victory at Lake George (see p. 127), and received a large grant of land here for his subsequent services. He was the father of 100 children by his Indian and white mistresses, one of whom was a sister of the famous Mohawk chief, Joseph Brant. His strong stone mansion still stands.

The *Mohawks* were, perhaps, the best known of the Indian tribes which formed the confederation known as the *Five Nations*, occupying the great Lake District of New York. The other members of the league, named from E. to W., were the *Oneidas*, *Onondagas*, *Cayugas*, and *Senecas*. The *Tuscaroras* from Carolina were afterwards admitted to the league, which then took the name of the *Six Nations*. The confederacy had about 15,000 members, and perhaps 10-12,000 still exist, the majority in Canada, the others in reservations in New York, where they live as peaceable farmers.

From (198 M.) *Palatine Bridge* (305 ft.) coaches run to (14 M.) *Sharon Springs* (p. 96). To the left, farther on, is seen the red-brick *Herkimer Mansion*, with a monument to Nicholas Herkimer, who died in 1777 of wounds received at Oriskany (p. 131).

217 M. **Little Falls** (375 ft.; *Rockton*, $ 2), a small manufacturing town with (1905) 11,120 inhab., romantically situated in a narrow *Gorge cut by the Mohawk through a spur of the Adirondacks. The river, the N. Y. C. and West Shore railways, and the Erie Canal can barely make their way through the pass side by side. The Mohawk here descends 45 ft. in $\frac{1}{2}$ M., forming a series of pretty little falls, and the houses cling picturesquely to the steep rocky sides of the defile. This gorge affords an excellent opportunity of studying the crystalline rocks of the Laurentian formation, part of the oldest dry land on the face of the globe. *Richfield Springs* (p. 131) is 12 M. to the S. — Farther on we cross the *Canada Creek* and reach (224 M.) *Herkimer* (Palmer Ho., Waverley. $ 2;

6595 inhab. in 1905), where connection is made with the *Adirondack Division*, though the principal through-trains run viâ Utica (comp. p. 115).

Beyond (226 M.) *Ilion* (400 ft.), a pretty village to the left, with a small-arms factory, the train crosses the river and canal.

238 M. **Utica** (410 ft.; *Butterfield*, from $ 3; *Baggs*, $ 2½-4, *Yates*, $ 2-3; *Rail. Restaurant*), a prosperous town and headquarters of the American cheese trade, with (1905) 62,935 inhab., lies on S. bank of the Mohawk, on the site of *Fort Schuyler* (1756). To the W. is the *State Lunatic Asylum. Genesee Street* is a handsome thoroughfare. A tablet commemorates the visit of Lafayette in 1825.

From Utica to *Malone* (Adirondacks), see R. 8d.

From Utica to Ogdensburg, 134 M., railway in 5-5½ hrs. (fare $ 4.21). This line runs to the N., connecting Utica with Lake Ontario and the St. Lawrence, and forming part of a favourite through-route from New York to the Thousand Islands (p. 154). — The train crosses the Mohawk. 17 M. *Trenton Falls Station* (840 ft.; Hotel Trenton, $ 3; Trenton Falls Hotel, $ 2) is about ½ M. from the *Trenton Falls, a scene of mingled grandeur and beauty, which is by no means so well or widely known as it deserves. The *West Canada* or *Kahnata* ('amber-water') *Creek*, the *Kauyahoora* ('leaping water') of the Indians, here forms a highly picturesque ravine, with abrupt rocky sides, through which, within 2 M., the water descends 310 ft. in a charming series of five main falls and innumerable rapids. The stratification of the limestone rocks is very clearly defined, exposing the geological and the fossil organic remains to full view; and an abundance of interesting fossils, including innumerable trilobites, have been found. The name of the Trenton formation is taken from this place. We descend (fee 25 c.) to the floor of the ravine by a staircase near the Hotel Trenton and walk up past the singular *Sherman Falls* (35 ft.), the *High Falls* (80 ft.), the *Mill Dam Falls* (15 ft.), the rocky amphitheatre called the *Alhambra*, the curious formation named the *Rocky Heart*, and the *Prospect Falls* (20 ft.). We may then return to the hotel (2½ M.) by a path along the top of the cliffs, affording fine *Views of the chasm. — At (21 M.) *Remsen* we part company with the line to Malone (see p. 116). Beyond (35 M.) *Boonville* we ascend the valley of the *Black River*. 45 M. *Lyons Falls* (845 ft.; falls to the right, 70 ft. high); 58 M. *Lowville* (Rail. Restaurant). — 74 M. *Carthage* (740 ft.; Kenmore, $ 2) is the junction of lines E. to *Benson Mines* and *Newton Falls* in the Adirondacks (near *Cranberry Lake*) and W. to *Watertown* (p. 132) and (30 M.) *Sackett's Harbor* (455 ft.; Eveleigh Ho., $ 2), on Lake Ontario. — At (87 M.) *Philadelphia* we cross the line from *Rome* (p. 132) to *Massena Springs* (p. 155). 92 M. *Rivergate*, for the line to (16 M.) *Clayton* (p. 154), on the St. Lawrence; 123 M. *Morristown*. — 134 M. Ogdensburg (250 ft.), see p. 154.

From Utica to Binghamton, 95 M., *Delaware, Lackawanna, & Western R. R.* in 3-4 hrs. (fare $ 2.85). — From (13 M.) *Richfield Junction* a branch-line runs to (22 M.) *Richfield Springs* (see below; through-cars from New York). — 95 M. *Binghamton*, see p. 141.

[Richfield Springs (1700 ft.; *Earlington*, $ 4; *Tuller Ho.*, $ 3; *Kendallwood*, from $ 3), a group of hotels and cottages, 1 M. from the head of the pretty little *Candarago Lake* (boating and fishing), is much frequented both for its picturesque scenery and for its sulphur springs. The latter, 17 in number, are especially efficacious in cutaneous disorders, and are used both for drinking and bathing. The *Bath House includes a swimming-basin. Among the favourite drives are those round Candarago Lake (12 M.), to (5 M.) *Mt. Otsego*, to (3 M.) *Allen's Lake*, and to (15 M.) *Cooperstown* (p. 96).]

Beyond (244½ M.) *Oriskany* (420 ft.) an obelisk on a hill to the left marks the battle-ground of Aug., 1777, when Gen. Her-

kimer was defeated and slain by the Indians (see p. 130). — We cross the river and the canal.

252 M. **Rome** (*Stanwix Hall*, $ 2-3; *Arlington*, $ 2), a town of (1905) 16,560 inhab., with cheese-factories and rolling-mills, occupies the site of the Revolutionary *Fort Stanwix*. It is an important railway-junction, and the Erie Canal is joined here by the *Black River Canal* from Lyons Falls (p. 131).

From Rome the *Rome, Watertown, & Ogdensburg R. R.* runs to the N. to (73 M.) *Watertown*, (141 M.) *Ogdensburg* (p. 154), and (160 M.) *Massena Springs* (p. 155), connecting at (147 M.) *Norwood* with the Rutland R. R. line to *Moira* (p. 113), *Malone* (p. 118), and *Rouse's Point* (p. 128). — Watertown (*Woodruff*, from $ 2½. R. from $ 1; *Hardiman*, $ 2), with (1905) 25,445 inhab., has manufactures of air-brakes, carriage-works, and paper-mills.

265 M. *Oneida* (Madison Ho., $ 1½).

The *Oneida Community*, a communistic society founded by J. H. Noyes in 1847, lies 3 M. from Oneida, but is now simply a business-corporation. To the S. is the *Oneida Indian Reservation*. About 6 M. to the N.W. is *Oneida Lake* (p. 231).

Beyond (270 M.) *Canastota* (425 ft.) we cross the Erie Canal. 276 M. *Chittenango*, at the entrance of the narrow valley through which *Cazenovia Lake* drains into Lake Oneida. — 283 M. *Minoa*. The train now enters Syracuse, passing along the main street, without fence or barrier.

291 M. **Syracuse** (400 ft.; *The Yates*, $ 4-5, R. from $ 1; *Warner*, R. from $ 1; *St. Cloud, Jefferson*, $ 2-3; *Rail. Restaurant*), a thriving industrial city of (1905) 117,505 inhab., situated at the S. end of *Onondaga Lake* (365 ft.; 6 M. long, 1½ M. wide), owed the beginning of its prosperity to the salt-springs in the marshes bordering the lake, which have been exploited since 1650. A visit to the evaporating houses, brine-conduits ('salt logs'), and pumping-houses is interesting, though the production of salt (3,000,000 bushels yearly) now forms a relatively unimportant item in the busy industry of the city (value of manufactures in 1900, $ 31,948,000). The *Erie Canal* runs through the town at present, but the new plans (comp. p. 92) may ultimately change this.

Among the most noteworthy buildings are the *Town Hall*, Washington St., in the Richardsonian style; the *Post Office*, in Fayette St., a pleasing relief to the stereotyped Mansard-roofed Government buildings; the *Syracuse Savings Bank*, on the Canal; *St. Paul's Cathedral; St. John's Cathedral* (R. C.); the *First Presbyterian Church;* the *First Methodist Church;* the *Dutch Reformed Church;* the *May Memorial Church* (Unitarian); the *Onondaga Bank Building;* the *Carnegie Free Library*, containing the *Museum of Fine Arts;* the huge *University Block;* three large *Hospitals;* and the *Court House*.

In the S.E. part of the town are the handsome buildings of Syracuse University (3200 students, 215 professors, 6 faculties).

These include the *John Crouse College of Fine Arts*, the *Lyman Smith College of Applied Science*, the *Hall of Physics*, the *Hall of Languages*, the *Library* (90,000 vols., incl. Leopold von Ranke's historical collection), the *Holden Observatory* (open to the public on the 2nd and 4th Tues. of each

month), the *Lyman Hall of Natural History*, the *Bowne Hall of Chemistry*, and the enormous *Gymnasium*. The *Stadium*, of reinforced concrete, exceeds the Colosseum in area and seats 20,000 people (with improvised seats, 40,000). The hill on which the University stands commands a splendid View of the city, lake, and hills. Adjacent lies *Oakwood Cemetery*. The *Medical* and *Law Colleges* of the University occupy buildings in the centre of the city. The *Teachers College* is in Renwick Castle.

The handsomest residence street is James Street, leading to the N.E. from the centre of the town. — A Boulevard, 100 ft. wide, has been constructed round Onondaga Lake.

Railways radiate from Syracuse to *Oswego* (p. 231), *Richland*, *Ithaca* (p. 145), etc. The *Oswego Canal* here joins the Erie Canal.

Between Syracuse and Rochester (p. 135) the N. Y. C. & H. R. R. R. has two routes: — the *Direct Route* (81 M.), used by through trains, and the *Old Route* (103 M.) via Auburn, Geneva, and Canandaigua. Both are described below.

a. Direct Route from Syracuse to Rochester. As we leave Syracuse, we have a good view to the right of Lake Onondaga and the small town of *Solvay* (practically a part of Syracuse), with the huge works of the *Solvay Process Co.*, for the manufacture of soda ash. The line runs through a pastoral district, repeatedly crossing the Erie Canal and passing numerous small towns. Beyond (313 M.) *Weedsport* we cross the *Seneca River*. At (349 M.) *Palmyra* (440 ft.) Joseph Smith, the Mormon prophet, claimed to have found the golden plates of the Mormon Bible (p. 500). Large crops of peppermint are raised here.

372 M. *Rochester*, see p. 135.

b. From Syracuse to Rochester via Canandaigua ('Auburn Road'). We cross the Erie Canal and run to the S. of W. From (308 M.) *Skaneateles Junction* (610 ft.) a branch-line runs to (5 M.) *Skaneăteles* (five syllables), situated on *Lake Skaneateles* (860 ft.), a pretty sheet of water, 15 M. long and $\frac{1}{2}$-$1\frac{1}{2}$ M. wide, traversed by a small steamboat. At the head of the lake is the *Glen Haven Sanitarium*. — 317 M. Auburn (715 ft.; *Osborn Ho.*, $ 2-3, very fair; *Avery*, $ 2-$2\frac{1}{2}$), a manufacturing city of (1905) 31,422 inhab., situated on the outlet of *Owasco Lake* (11 M. × 1 M.), which lies 3 M. to the S. The *Auburn State Prison*, with 1200 convicts, is well known for its 'silent system' of discipline. *W. H. Seward* (1801-72), Secretary of State during the Civil War, long lived here and is buried in *Fort Hill Cemetery*, which is supposed to occupy an eminence raised by the Mound Builders (p. lxi).

From Auburn to Freeville, 33 M., *Lehigh Valley R. R.* in $1\frac{1}{2}$-$1\frac{3}{4}$ hr. (fare 83 c.). — The line skirts *Lake Owasco* (left; see above). 11 M. *Ensenore*; 14 M. *Cascade*; 18 M. *Moravia*; 28 M. *Groton*. — 33 M. *Freeville*, see p. 146.

From Auburn to *Ithaca*, see R. 13.

At (328 M.) *Cayuga* (Rail. Restaurant) the train crosses the lower end of Cayuga Lake (see p. 145) by a bridge more than 1 M. long. 333 M. *Seneca Falls*, situated at the falls of *Seneca River*, the outlet of Seneca Lake (p. 134); 336 M. *Waterloo*.

343 M. Geneva (450 ft.; *The Nester*, $ 2½-3; *Kirkwood Ho., Carrollton*, $ 2-2½), a pleasant little city with (1905) 12,249 inhab., extensive nurseries for seeds and flowers, and the interesting Experimental Farm of the State of New York, lies at the N. end of *Seneca Lake* (see below). *Hobart College*, founded in 1822, has an excellent laboratory and other equipment and a library of 50,000 vols. (President, Rev. Dr. L. C. Stewardson; 135 students). It now includes the *William Smith College* (1908), a co-ordinate school for women, and the well-known *William Smith Observatory*. Geneva is the junction of lines to *Watkins*, *Ithaca*, *Lyons*, etc.

*Seneca Lake (440 ft.), one of the most beautiful of the New York lakes, is 38 M. long and 2-6 M. wide. It is surrounded by hills, is very deep (nearly 700 ft.), and never freezes. At a depth of 300 ft. the temperature is constant at 39° Fahr. Only a narrow ridge divides it from Cayuga Lake (p. 145). Steamers ply in summer thrice daily from Geneva to *Watkins* (see below), calling at intermediate points (fare 25 c.).

*Watkins (*Glen Park Hotel*, near the entrance to the Glen, $ 2-3; *Jefferson*, unpretending, $ 2), a pleasant village of (1905) 2957 inhab. with tree-shaded streets, is frequented by thousands of visitors to Watkins and Havana Glens. It is also reached viâ RR. 12c, 12e. Above the village, 300 ft. above the lake, is *The Glen Springs*, a health-resort and hotel known as the 'American Nauheim' ($ 4-5; from $ 40 per week, incl. treatment), with mineral springs and baths, beneficial in gout, diabetes, etc.

The entrance to *Watkins Glen (now a public park, open free) is ½ M. from the lake, to the right, just on this side of the bridge. The glen, which may be described as a somewhat less imposing edition of the Ausable Chasm (p. 108), is 2½-3 M. long, and is traversed by paths, steps, and bridges (stout shoes and waterproofs desirable). The points of interest are indicated by sign-posts. Among the finest are the **Cathedral* (with its wonderfully smooth floor, and rocky sides 300 ft. high), *Glens Alpha* and *Omega*, *Elfin Glen*, and *Pluto Falls*. At the Suspension Bridge we do not need to cross but remain on the same side of the ravine and descend a flight of steps to the left. Farther on the path passes behind the small *Rainbow Falls*, where a rainbow is generally visible about 4 p.m. The head of the glen is spanned by a railway-bridge, 165 ft. high. Here we cross the bridge and ascend the path to *Watkins Station* (rfmts.). Opposite, on the other side of the track, is a gap in the fence, where begins the short path back to the village along the top of the cliffs on the left side of the glen. It leads through wood for 10-12 min. and then emerges on a plateau commanding a *View of the lake and village. We descend through the Glen Springs Park in 15-20 min. more.

Visitors to Watkins may also visit the **Havana Glen**, about 3 M. to the S.E., though its paths and bridges have been so neglected as to be now nearly impassable. This glen is about 1¼ M. long, and its most striking feature is the wonderful rectangularity of the rocks in its lower part. This is specially evident in the square **Council Chamber*, no far from the entrance. The prettiest falls are, perhaps, those descending from the Council Chamber; farther up are the *Bridal Veil*, *Jacob's Ladder*, and the *Curtain Falls*. — There are other pretty glens in the neight bourhood.

Beyond Geneva the line makes a wide sweep to the N. 355 M. *Clifton Springs* (620 ft.; Sanitarium, from $ 3), with sulphurous springs. — 365 M. *Canandaigua* (740 ft.; Seneca Point Hotel, Canandaigua Ho., $ 2-5), a village with (1905) 7332 inhab., at the N. end of **Canandaigua Lake** (670 ft.; 15 M. long and 1 M. wide).

Steamers ply on the lake to various points of summer-resort.

From Canandaigua to Watkins, 47 M., *Northern Central Railway* in 1½ hr. — This line runs towards the S.E. 24 M. *Penn Yan* (Benham Ho., $ 2-2½; Knapp Ho., $ 2), at the head of *Lake Keuka, a charming little sheet of water, 710 ft. above the sea and 265 ft. above Seneca Lake (p. 134), from which it is separated by a narrow ridge. It is 18 M. long and ½-1½ M. wide. Steamers (fare 25 c.) ply from Penn Yan to *Hammondsport*, at the head of the lake. Much wine is raised on its banks. — 47 M. *Watkins* (p. 134). Beyond this point the railway goes on to *Elmira* (p. 142), Philadelphia, Washington, and Baltimore.

Canandaigua is also the junction of a line to Buffalo viâ *Batavia* (see below).

The stations hence to (394 M.) *Rochester* are unimportant.

Rochester (510 ft.; *Seneca*, R. from $ 1½; *Rochester*, R. from $ 1½; *Powers Hotel*, R. from $ 1; *Osburn Ho.*, $ 2-3; *Whitcomb; Rail. Restaurant*), a city of (1905) 181,665 inhab., situated on both sides of the *Genesee*, 7 M. from Lake Ontario, makes flour, beer, clothing, boots, and other articles to the annual value of $ 85,000,000. Near the middle of the city the river forms a perpendicular *Fall*, 90-100 ft. high (best seen from the Platt St. Bridge, reached from the Powers Hotel by following Main St. to the left, State St. to the left, and Platt St. to the right). The river forms two other falls to the N. within the city-limits, the *Middle Fall*, 25 ft. high, and the *Lower Fall*, 96 ft. high (total horse-power 50,000). — *Main St.* crosses the river by a concealed bridge, lined on both sides with houses in the style of old London Bridge. Near this the Erie Canal is conducted over the river by an *Aqueduct*, 850 ft. long and 45 ft. wide, a fine piece of engineering. — A good *View of the city is obtained from the tower (204 ft.) of the *Powers Building* (10 c.). — The *University of Rochester* (370 students), in the E. part of the city, has good geological collections. — *St. Bernard's Seminary* (R. C.) has 200 pupils. — The *City Hall*, near West Main St., has a tower 175 ft. high. — The *Masonic Temple* is unusually large and complete. *Mt. Hope Cemetery* is pretty, and the *Public Parks* are well laid out. The statue of *Frederick Douglass* (1817-95), the coloured statesman, is by S. W. Edwards (1898). — Interesting visits may be paid to the large *Flour Mills* and *Breweries* (lager beer), lining the river, to the extensive *Nurseries* in the outskirts of the city, and to the headquarters of the *Eastman Kodak Co.* Rochester is a great centre of Spiritualists and supporters of Woman's Rights.

Railways radiate from Rochester to Elmira and New York, Pittsburg, Niagara Falls, Charlotte (see p. 231), *Ontario Beach* (Hot. Ontario, $ 2), on Lake Ontario, etc. — A large ferry-steamer runs from Rochester across Lake Ontario to *Cobourg*, Ontario (see *Baedeker's Canada*).

The direct Railway to Niagara Falls (78 M.) runs viâ *Lockport* (canal-locks with lift of 66 ft.) to *Suspension Bridge* (p. 144) and the *Falls* (p. 146).

The train crosses the Genesee above the falls (not seen from the line). — 404 M. *Batavia* (Richmond Hotel), with (1905) 10,080 inhab. and the *State Blind Asylum*, is the junction of various railways. The old *Holland Purchase Land Office* contains a collection of relics of the pioneer days of Western New York. To the right is seen the

monument to *William Morgan*, believed to have been murdered by the Free Masons in 1826 to prevent the publication of his book on the secrets of the craft. — 436 M. *East Buffalo.*

440 M. **Buffalo.** — **Railway Stations.** *Union* or *Central Depot* (Pl. D, 7), Exchange St., for trains of the N. Y. C., West Shore, Michigan Central, Lake Shore, Penna., Grand Trunk, Buffalo & Susquehanna, and Buffalo, Rochester, and Pittsburg R.R.; *Erie Depot* (Pl. D, 7), Exchange St., a little to the E., also used by the Wabash, and N. Y. C. & St. L. R.R.; *Delaware & Lackawanna Depot* (Pl. C, 8), at the foot of Main St.; *Lehigh Valley Depot* (Pl. C, 7, 8), cor. of Washington and Scott Sts.

Hotels. *Hotel Iroquois (Pl. a; C, 7), a well-built and finely equipped fire-proof structure, at the corner of Main and Eagle Sts., R. from $ 1½; Hotel Statler (Pl. b; C, 7), cor. Washington and Swan Sts., R. with bath from $ 1½; Hotel Touraine (Pl. d; C, 6), cor. Delaware Ave. and Johnson Park, R. from $ 1½; Lenox Hotel (Pl. k; C, D, 5), North St., near Delaware Ave., with roof-garden, R. from $ 1½; Lafayette Hotel (Pl. h; D, 7), at the corner of Clinton and Washington Sts., R. from $ 1½; Niagara (Pl. i; B, 5), Porter Ave., pleasantly situated (view), from $ 3; Genesee (Pl. c; C, D, 6), at the corner of Genesee and Main Sts., R. from $ 1; Broezel Ho. (Pl. f; D, 7), close to Union Depot, from $ 3; Mansion House (Pl. g; C, 7), $ 2-3; Stafford (Pl. e; C, 7), $ 2-2½.

Restaurants. At most of the hotels; *Statler*, Ellicott Sq. Building, Swan St.; *Fleischmann's Ratskeller*, Main St., cor. of N. Division St.; *Hofbrau*, Pearl St., near Eagle St.; *German-American Restaurant*, cor. of Main & High Sts.; *Childs' Dairy Co.*, 329 Main St. and in Seneca St.

Steamboats ply regularly to the chief points on Lake Erie and the other Great Lakes (comp. p. 364).

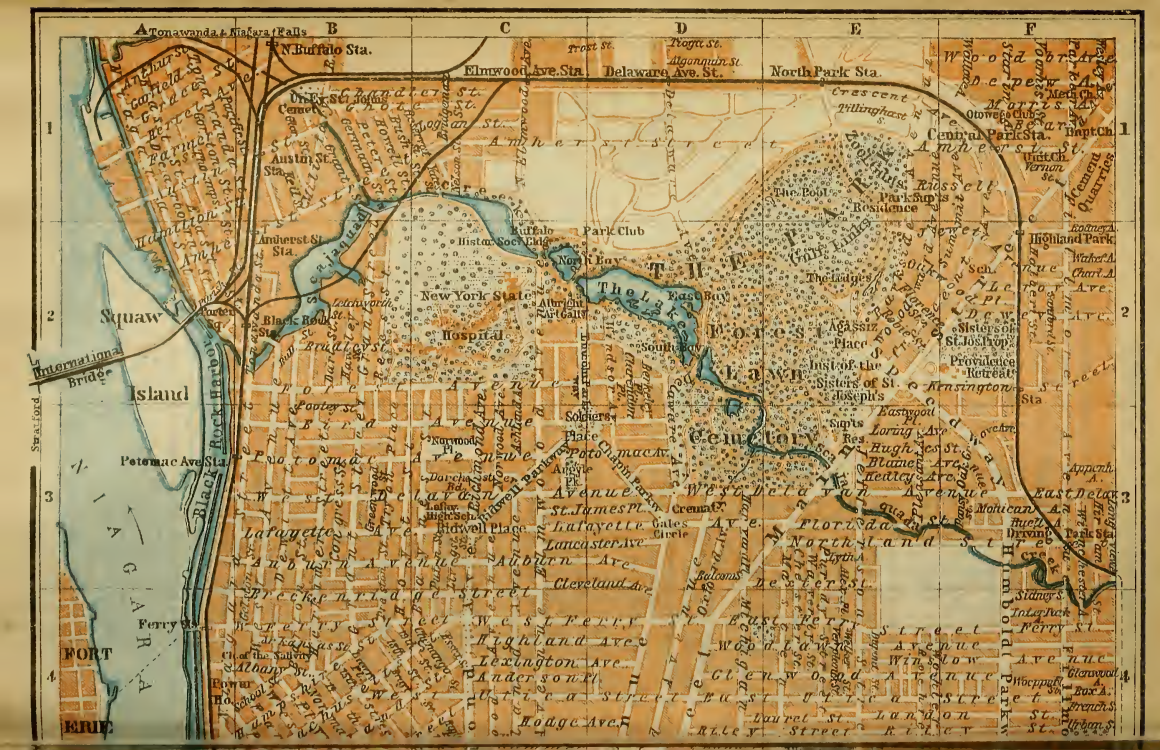
Cabs. For 1 pers. for 1 M. 50 c., each pers. addit. 25 c., 2 M. 50 c. each, above 2 M. $ 1 each; per hour 1-4 pers., $ 1½; one article of luggage free, each addit. article 5-10 c. — **Street Cars** *(Tramways)*, propelled by electric power generated by Niagara Falls (comp. pp. 148, 149), traverse all the principal streets (5 c.) and also run to *Tonawanda* (p. 139), *Niagara Falls* (comp. p. 139), etc. — **A Belt Railway Line**, starting at the Union Depot, makes the circuit of the city (15 M.) in ¾ hr. (fare 5 c.).

Theatres. *Star Theatre* (Pl. C, 7), cor. Pearl and Mohawk Sts. (50 c. to $ 1½); *Teck Theatre* (Pl. D, 6), Main St. (25 c. to $ 1); *Lyric* (Pl. D, 7), Washington St., near Broadway (15-75 c.); *Shea's Theatre* (Pl. C, 7), for vaudeville (25-75 c.); *Garden Theatre*, near City Hall.

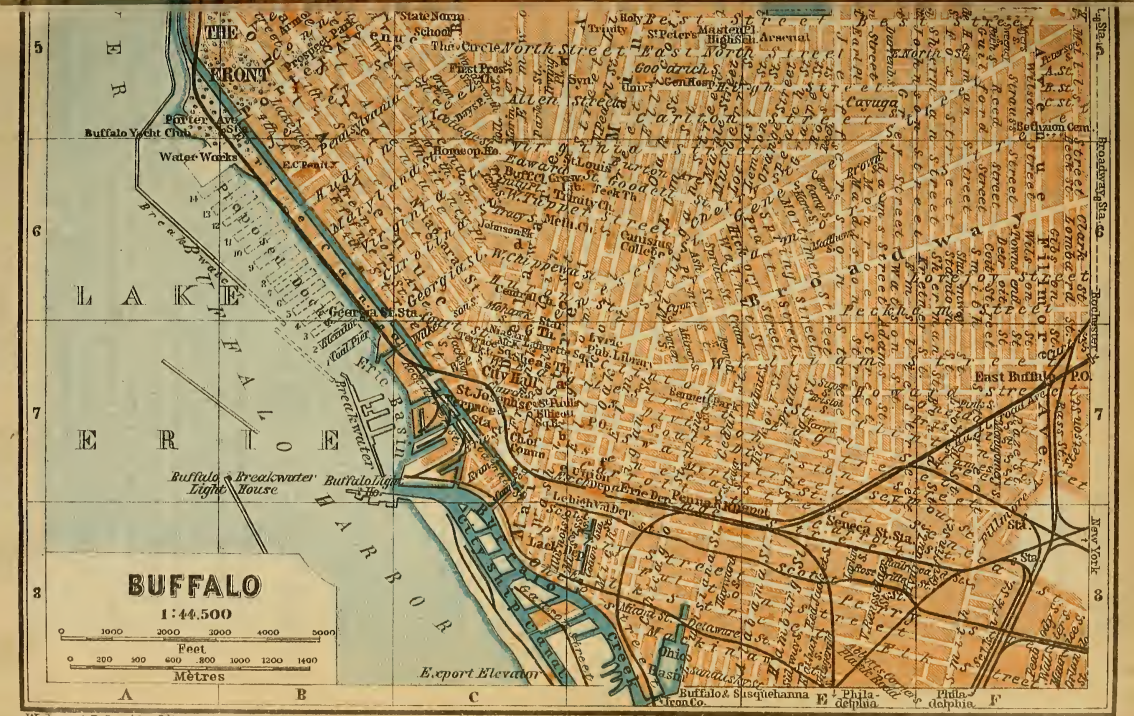
Post Office (Pl. D, 7), Swan St.

Buffalo, the second in size of the cities of New York State, with (1905) 376,585 inhab., lies at the E. end of *Lake Erie*, at the mouth of the *Buffalo Creek* and head of the *Niagara River*, 20 M. above the Niagara Falls. It is well built, and many of its wide streets are shaded with trees and smoothly paved with asphalt.

The name of the city is supposed to be derived from the herds of buffalo which frequented the creek here entering the lake. The first dwelling for a white man was erected here in 1791, but it was not till after the construction of the Erie Canal in 1825 that the place increased with any great rapidity. Between 1890 and 1900 it added nearly 100,000 souls to its population. The commerce of Buffalo is very great, as its situation makes it an emporium for much of the traffic with the great North-West. Its lake-harbour is safe and capacious, and it has several miles of water-front. Lumber (300 million feet annually), grain (180 million bushels), coal (15 million tons), and live-stock are among the chief articles of trade. The grain elevators have an aggregate capacity of 24 million bushels. The industrial products of Buffalo include beer, spirits, flour, oil, railway cars, iron, steel, elevators (Otis Co.), metal goods, soap, and starch. They employ 58,000 hands, while their produce in 1906 was valued at $ 197,846,740.



A
B
C
D
E
F
1
2
3
4
Tonawanda & Niagara Falls
N. Buffalo Sta.
Elmwood Ave. Sta.
Delaware Ave. St.
North Park Sta.
Trost St.
Tioga St.
Algonquin St.
Crescent
Tillinghast
Central Park Sta.
Amherst Street
Amherst St.
Austin St. Sta.
Amherst St. Sta.
Buffalo Park Club
Histor. Soc. Bldg.
North Bay
The Lake
East Bay
South Bay
New York State Hospital
Albright Art Gallery
Black Rock Sta.
Squaw Island
International Bridge
Black Rock Harbor
Potomac Ave. Sta.
Ferry St.
FORT ERIE
NIAGARA
Forest Lawn Cemetery
The Pool
Park Sup'ts Residence
The Ledges
Agassiz Place
Inst. of the Sisters of St. Joseph's
Sisters of St. Jos. Prop.
Providence Retreat
Kensington Sta.
Highland Park
Cement Quarries
Soldiers Place
Potomac Av.
Chapin Parkway
Bidwell Parkway
Bidwell Place
Lafayette Ave.
Auburn Ave.
Cleveland Ave.
Breckenridge Street
West Ferry
Highland Ave.
Lexington Ave.
Anderson Pl.
Utica Street
Hodge Ave.
Florida
Northland Street
Dexter St.
Woodlawn Avenue
Winslow Avenue
Glenwood Avenue
East Utica Street
Laurel St.
Riley Street
Humboldt Parkway
Sidney S.
Ferry St.
Park Sta.
Driving Park
Mohican A.
East Delaware
Appenh. A.
Hughes St.
Blaine Ave.
Hedley Ave.
Loring Ave.
Eastwood Pl.
Sup'ts Res.
Sisters of St. Jos. Prop.
Kensington Street
Highland Park
Wakef. A.
Charl. A.
Rodney A.
Cemetery
Cremat.
Gates Circle
Balcom S.
Lyth A.
Wooppell St.
Glenwood A.
Box A.
French S.
Urban S.
Stratford


BUFFALO
1:44.500
0 1000 2000 3000 4000 5000
Feet
0 200 400 600 800 1000 1200 1400
Mètres
LAKE ERIE
BUFFALO HARBOR
THE FRONT
Buffalo Yacht Club
Water Works
Porter Ave
Buffalo Breakwater Light House
Buffalo Light Ho.
Erie Basin
Breakwater
Georgia St. Sta.
Erie Canal
Proposed Dock
Canisius College
City Hall
St. Joseph's Cathedral
Lyric Pub. Library
Bennett Park
Erie Dep.
Penna R.R. Depot
Lehigh Val. Dep.
Lack. Dep.
Seneca St. Sta.
East Buffalo P.O.
Broadway
Fillmore Ave.
Cayuga
Bethzion Cem.
Broadway Sta.
Rochester
New York
Buffalo & Susquehanna Iron Co.
Philadelphia
Philadelphia
Export Elevator
Ohio Basin
Delaware St.
Miami St.
Sandusky St.
Hamburg St.
Abbotts Corners Plank Road
Wagner & Debes' Geog. Estab. Leipzig.

The population includes a large proportion of Germans and many Poles and Italians.

Lake Erie (570 ft.), the second (counting from the E.) of the chain of Great Lakes between the United States and Canada, is 250 M. long and 60 M. wide. It is by far the shallowest of all, having an average depth of only 84 ft. It connects with Lake Huron by the Detroit and St. Clair Rivers (see p. 365) and pours its waters into Lake Ontario by the Niagara River (see p. 147). It is the scene of a very busy navigation, about 9000 vessels, of an aggregate burden of 14,000,000 tons, annually entering and clearing the port of Buffalo alone. The first vessel to navigate the lake was built on the Niagara River by La Salle in 1679, and the first steamboat was launched in 1818.

To reach Main St. (Pl. C-F, 1-8) from the *Union Depot* (Pl. D, 7), we proceed to the left (W.). Following Main St. to the right (N.), we pass the *Chamber of Commerce* (Pl. C, 7), at the corner of Seneca St., and the huge *Ellicott Square Building* (Pl. C, 7; cor. of Swan St.), with 16 elevators and housing a business-community of 4-5000 souls. On the left are **St. Paul's Church*, one of the most successful Gothic (E. E.) churches in America, and the *Erie Co. Savings Bank*. A little back from the church, fronting on Franklin St., is the substantial *City Hall*, with a tower 200 ft. high (view). [Close by, at the S.W. corner of Pearl and Church Sts., is the **Prudential Building*, by Louis Sullivan, a fine example of simple yet dignified commercial architecture, with terracotta ornamentation.] To the right, at the corner of Eagle St., is the imposing *Iroquois Hotel* (p. 136; view from roof). A little farther on, the street crosses *Lafayette Square* (Pl. C, D, 7), with a *War Monument*. Here, to the right, at the corner of Broadway, stands the handsome **Public Library** (Pl. D, 7), which contains 320,000 vols. and various collections.

The spacious **Reading Room* on the groundfloor contains a very interesting collection of autograph MSS. (Emerson, Whitman, Lowell, Howells, C. E. Craddock, etc.). — The basement and upper floors are occupied by the museum of the *Society of Natural Sciences*.

Main St. now intersects the wide *Genesee Street* (Pl. C-F, 5-7). To the left, $^1/_2$ M. farther on, at the corners of Edward St., are the large *Teck Theatre* (p. 136) and the R. C. *Church of St. Louis* (Pl. D, 6).

Just to the W. of this point, at the S.E. corner of Edward St. and Franklin St., is the *Grosvenor Library* (Pl. D, 6), a free reference library with about 70,000 vols. (open 6-9).

One of the finest residence-streets in Buffalo is **Delaware Avenue* (Pl. C, D, 1-7), which runs to the W. of and parallel with Main St. It begins at *Church Street* (Pl. C, 7) and soon crosses *Niagara Square* (Pl. C, 7), which is adorned with a monument to President McKinley (by Carrère & Hastings), who was assassinate at Buffalo in 1901. At the corner of Niagara Sq. and DelawareAve. is the house of *President Millard Fillmore* (1800-1874), now a hotel. Among the other buildings in this street are the *Municipal Building*, above Church St.; the *Methodist Episcopal Church* (Pl. C, 6), cor. of Tupper St.; **Trinity Church* (Pl. C, 6) and the *Saturn Club*, between

Tupper and Edward Sts.; the *University Club*, cor. of Allen St.; the *Twentieth Century Club* (for women); and the *Synagogue* (Pl. D, 5), between Allen and North Sts.

Delaware Ave. leads to (2½ M.) *Forest Lawn Cemetery* (see below), but in the meantime we may turn to the left at (1¼ M.) *North Street* (Pl. C-E, 5), another handsome residence-street, with the large *Lenox Hotel* (p. 136) near the corner, and follow it to (½ M.) the *Circle* (Pl. C, 5), containing the *First Presbyterian Church*. Beyond the Circle we follow *Porter Avenue*, which leads to (¼ M.) the small *Prospect Park* (Pl. B, 5; with the *74th Regiment Armoury* and the Niagara Hotel, p. 136) and (¼ M.) the ***Front** (Pl. A, B, 5), a bold bluff on the Niagara River, affording a fine view of Lake Erie, the river, and the Canadian shore (1 M. distant). Just to the N. is *Fort Porter*, a small military station (band and dress parade at sunset).

From the Front *Niagara Street* leads along the river, past the *Waterworks* (Pl. A, 4; with a 'crib' in the river) and *Fort Erie Ferry* (Pl. A, 4), to (2 M.) the International Bridge (Pl. A, 2), ¾ M. long, which crosses the river with the aid of *Squaw Island*.

From the Front we now follow *Massachusetts Street* (Pl. B, C, 4), *Richmond Avenue* (Pl. C, 4, 3), and *Bidwell Parkway* (Pl. C, 3) to Soldiers' Place (Pl. C, D, 3). From this point *Lincoln Parkway* leads to the N. to the ***Albright Art Gallery** (Pl. C, 2), a handsome white marble structure in a fine Greek style, by Green & Wicks (1905; portico a reproduction of the N. porch of the Erechtheum). It contains the collections of the *Buffalo Fine Arts Academy*, including pictures, engravings, etchings (by Sir Seymour Haden, etc.), sculptures, casts, and other works of art (adm. 25 c., free on Sat. & Sun.; Director, *Dr. C. M. Kurtz*). The Art School has 300 pupils.

The Albright Gallery stands in the ***Park** (Pl. D, E, 1, 2), which is prettily laid out and also contains a boating lake, the *Park Club*, and the building of the *Buffalo Historical Society* (Pl. C, 2), in front of which are two fine Italian bronze candelabra of the 16th century. Inside are a library of 25,000 vols. and the interesting 'Old Buffalo' room. — To the W. of the Park are the large grounds and buildings of the *State Insane Asylum* (Pl. C, 2; open on Mon., Wed., & Frid., 2-5 p.m.). — Adjoining the Park on the S. and E. is ***Forest Lawn Cemetery** (Pl. D, E, 2, 3), with the grave of *President Fillmore* (see p. 137). Near the S.W. entrance are a statue of the Indian chief *Red Jacket* and a *Crematorium* (Pl. D, 3).

On the S.E. Forest Lawn Cemetery is bounded by Main St., whence we may return to our hotel by tramway. Or we may follow it out for about ½ M. to the Speedway (Pl. E, F, 2-3). This, continued by the Humboldt Parkway (Pl. F, 3, 4), leads to (1½ M.) **Humboldt Park** (Pl. F, 5), another portion of the park system, with a famous lily pond and a wading pool for children. Thence we may now return to Main St. by Genesee St. (tramway). — Those who have time may take a car on *Broadway* (Pl. D-F, 6, 7) and proceed through a German and Polish district to (3 M.) the *Pullman*

Company Car Works. — Farther on in the same direction, beyond a labyrinth of railway tracks, are a series of gigantic *Coal Trestles*, 1 M. long and 200 ft. high. — Among other buildings may be mentioned the *Post Office* (Pl. D, 7), bounded by Ellicott, Oak, Swan, and South Division Sts.; the *Buffalo General Hospital* (Pl. D, 5), High St.; the *Morgan Building* (good view from tower; adm. 10 c.), at the S.W. corner of Niagara and S. Pearl Sts. (Pl. C, 7); the *Arsenal of the 65th Regiment* (Pl. E, 5); the *Buffalo Yacht Club* (Pl. A, 5); *St. Joseph's Cathedral* (R. C.; Pl. C, 7), Franklin St.; *Canisius College* (Pl. D, 6), Washington St.; the *University of Buffalo* (Pl. D, 5), High St. (700 students); and the *Erie County Almshouse*, N. Main St. *South Park* (reached by tramway from Ellicott Sq.) contains horticultural gardens second only to those of St. Louis (p. 414).

Excursion Steamers run from the foot of Main St. to *Crystal Beach*, and from the foot of Ferry St. to *Fort Erie* (Canada) and down the River to *Grand Island*. Excursions may be also made to *Chautauqua* (p. 232), *Lakewood* (p. 231), *Lockport* (p. 135), *East Aurora* (p. 185), etc.; but the favourite is, of course, that to **Niagara Falls* (p. 146), which may be made by railroad (see below), by automobile (1¼ hr.), or by electric car (1¾ hr.; 35 c., return-fare 50 c.). — Buffalo is an important railway-centre, lines radiating hence in all directions (see RR. 19, 50, etc.).

The N. Y. C. line from Buffalo to Niagara Falls runs along the right bank of *Niagara River*. 444 M. *Black Rock;* 451 M. *Tonawanda*, with a large trade in lumber; 459½ *Echota*, with an electric power-house. — 462 M. **Niagara Falls**, see p. 146.

Beyond the Falls station the line goes on to (2 M.) *Suspension Bridge* and (7 M.) *Lewiston* (p. 153), where it connects with the steamer to *Toronto*.

b. Viâ West Shore Railroad.

453 M. Railway to (429 M.) *Buffalo* in 11½-16 hrs. ($ 8; parlor-car or sleeper $ 2); to (453 M.) *Suspension Bridge* in 12½-17 hrs. (same fares). The through-cars do not run through Albany, but holders of unlimited tickets may go viâ Albany, on notice to the conductor. From Schenectady onwards this line follows almost the same route as the N. Y. C. R. R., having been constructed as a rival line and afterwards bought up by the N. Y. C. R. R. Co.

From New York to (129 M.) *Ravena*, see R. 4 c. The Buffalo line here diverges to the left from that to *Albany* (p. 91). 143 M. *Voorheesville*, junction of a line to *Cobleskill*, etc. (R. 6); 153½ M. *South Schenectady* (p. 129); 160½ M. *Rotterdam*, junction of the B. & M. R. R. (p. 335). Our line follows the S. bank of the *Mohawk*, parallel with the N. Y. C. R. R. on the N. bank. 176 M. *Auriesville*, with the shrine mentioned at p. 130. From (191 M.) *Canajoharie* coaches run to (8 M.) *Sharon Springs* (p. 96; fare $ 1). 210 M. *Little Falls* (p. 130). From (217½ M.) *Mohawk* coaches run to (10 M.) *Richfield Springs* (p. 131). — 233 M. **Utica** (p. 131). — At (253 M.) *Oneida Castle* we intersect the N. Y., Ont., & W. R. R (see p. 231). — 279 M. **Syracuse** *(Rail. Restaurant)*, see p. 132. —

325 M. *Lyons.* Beyond (350 M.) *Fairport* the trains viâ (360 M.) *Rochester* (Rail. Restaurant; see p. 135) diverge to the right, while others keep on viâ (363 M.) *Genesee Junction.*

429 M. **Buffalo,** see p. 136.

From Buffalo to (453 M.) *Suspension Bridge*, Niagara, see p. 139.

c. Viâ Delaware, Lackawanna, & Western Railroad.

410 M. Railway to *Buffalo* in 10-13 hrs. (fare $8; parlor-car or sleeper $2). The trains start from *Hoboken* (ferries from W. 23rd St., Barclay St., and Christopher St.; comp. p. 10).

Hoboken, see p. 73. The train threads the *Bergen Tunnel* (7/8 M.). 11 M. *Passaic*, with (1905) 37,837 inhab., at the head of navigation on the *Passaic River.* — 15 M. **Paterson** (*Bellevue*, $2) is an industrial city with (1905) 111,529 inhab. and large silk and cotton mills. The *Passaic Falls* here are 50 ft. high. — 34 M. *Denville* (520 ft.).

Another route of the same railway to this point leads viâ (8 M.) *Newark* (p. 156); 12 M. **Orange**, a pretty little suburban city of (1905) 26,101 inhab., adjoining *West Orange*, with the laboratory and home (in Llewellyn Park) of Thomas A. Edison, the inventor (b. 1847; comp. p. 156), and also the home of H. A. Harvey (1824-93), the inventor of 'Harveyized steel'; 21 M. *Summit* (380 ft.); and (30 M.) *Morristown* (Mansion Ho., $ 2½), with a historical museum in a house occupied by Washington as headquarters in 1777 and later. — 37 M. *Denville*, see above.

From Summit (see above) a branch-line runs to (13 M.) *Bernardsville* (Somerset Inn, burned down in 1908), a pleasant summer-resort, and (21 M.) *Gladstone.*

From (46 M.) *Hopatcong* stages run to (4 M.) *Lake Hopatcong* (725 ft.), 8½ M. long and 3½ M. wide, with several summer-hotels. — 48 M. *Netcong* (870 ft.) is the station (stage) for (2½ M.) *Budd's Lake.* — From (57 M.) *Hackettstown* (570 ft.) stages run to *Schooley's Mountain* (1200 ft.), a summer-resort (Dorincourt Ho., from $ 2½) — 67 M. *Washington* (500 ft.) is the junction of a line to (14 M.) *Easton* (p. 144) and *Philadelphia.* Farther on our line penetrates the *Manunka Chunk Mt.* by the *Voss Gap Tunnel*, 330 yds. long. 78 M. *Manunka Chunk*, the junction of a division of the Penna. R.R.

88 M. **Delaware Water Gap** (320 ft.; *Water Gap Ho.*, **Kittatinny House*, $ 3-4; *Glenwood*, $ 2-3), a group of hotels and cottages, at the *Water Gap, or gorge, where the Delaware forces its way through the *Kittatinny* or *Blue Mts.*, the *Minsi* rising to the W. (in Pennsylvania) and *Tammany* (comp. p. 43) to the E. (in New Jersey). The gorge is about 2 M. long, with rocky sides 1500 ft. high, and is so narrow as barely to leave room for the railway and the river.

'Whether this immense chasm has been caused by one mighty eruption, or by a gradual yielding of stratum after stratum, by the immense pressure of the waters of a lake thousands of acres in area . . . is of course a subject of mere conjecture. . . . The evidences of the action of water and rocks hundreds of feet above the present level of the river-bed, and the masses of drift forming isolated hills and alluvial banks, indicate lake-like repose in the country now drained by the tributaries of the stream above the great gate in the mountain barrier' (*L. W. Brodhead's* 'Delaware Water Gap'). The Indian name of *Minisink* ('the water is gone'),

applied to the country above the Gap, points to the traditional existence of this lake. Several other gaps in the Blue Mts. are of similar late formation (comp. p. 187). — The Gap should be seen from the river, the road, Table Rock, and Lovers' Leap.

WALKS (comp. Map supplied at the hotels). To *Eureka Falls*, the *Moss Grotto*, and *Rebecca's Bath*, by the carriage-road through the Gap to (2/3 M.) the first creek. — *Hunters' Spring*, 1/3 M. farther up the **Eureka Glen*, is also reached by a white-marked path diverging to the right from the Mt. Minsi path (see below). — The *Silvan Way*, beginning at the small lake near the Water Gap House and indicated by white marks, leads viâ *Cooper's Cliff* and *Table Rock* (500 ft. above the river) to (1/2 M.) *Caldeno Falls*, the *Moss Cataract*, and *Diana's Bath*. — By turning to the left 200 yds. farther on we can descend to the (1/4 M.) *Ridge Path* (red marks) and follow it to the left, past the *Lovers' Retreat*, back to (1/2 M.) the hotel. — To ascend Mt. Minsi (1500 ft.; 1 1/2-2 hrs.) we follow the *Ridge Path* (see above; red marks), passing the *Lovers' Retreat* and *Winona Cliff*, and making a slight digression (path with yellow marks) to **Prospect Point* (1 M. from hotel; 700 ft. above the river; view). The top, 2 M. farther on, commands an extensive *View. The summit is also known as the *Sappers' View*, from the *Honourable Corps of Sappers and Miners*, an association of New Yorkers and Philadelphians, which had about 100 officers of various grades to command a single individual known as the 'High Private'. This body made many of the paths and roads in the vicinity. — On the top of Winona Cliff is the *Lovers' Leap*, reached by a blue-marked path diverging from the Ridge Path. — To ascend *Mt. Tammany* (1480 ft.; 1 1/2-2 hrs.) we cross the river and start below the slate-factory.

Among the favourite DRIVES are those to *Stroudsburg* (4 M.; see below), *Deer Park* and *Cherry Valley* (a round of 10 M.), *Buttermilk Falls* (3 M.), *Falls of Winona* (12 M.), *Marshall's Falls* (7 M.), and *Castle Rock* (4 M.).

A small STEAMER plies on the Delaware, and BOATS may be hired for rowing or fishing. Among the places visited along the river are the *Indian Ladder Bluff*, *Mather's Spring*, and the *Point of Rocks*.

From *Philadelphia* (p. 158) the Delaware Water Gap is reached by the Penna. R. R. in 3 1/2 hrs., viâ *Trenton* (p. 157).

In leaving the Water Gap the train crosses *Brodhead Creek* and penetrates *Rock Difficult* by a narrow cutting. — Beyond (93 M.) *Stroudsburg* (400 ft.) we soon begin to ascend the steep slope of *Pocono Mt.*, passing through a tunnel near the top (view). At (119 M.) *Tobyhanna* (1930 ft.) we begin to descend the W. slope of the Allegheny Mts., at places very rapidly. — 145 M. **Scranton** (1060 ft.; *Jermyn*, $ 3-5; *Terrace*, $ 2-3; *Coyne*, R. from $ 1), with (1900) 102,000 inhab. and a famous 'Correspondence School', at the confluence of the *Roaring Brook* and the *Lackawanna*, owes its importance to the vast adjoining fields of anthracite coal. Its iron industries are extensive. — Beyond Scranton we pass several small stations and enter *New York State* ('Empire State').

207 M. **Binghamton** (865 ft; *Arlington*, R. from $ 1; *Hotel Bennett*, $ 2 1/2-5), a manufacturing town of (1905) 42,035 inhab., is the junction of railways to Albany (D. & H. R. R.; p. 97), Richfield Springs (p. 131), Syracuse (p. 132), Utica (p. 131), etc., and of the Erie Railway (R. 12 d). — Our line here turns to the W. and follows the same course as the Erie Railroad (p. 144), the one on the right and the other on the left bank of the *Susquehanna*. 228 M. *Owego* (815 ft.; Ahwaga, $ 2), at the confluence of the *Owego* and the Susquehanna, is the junction of a line to Ithaca (p. 145).

264 M. **Elmira** (855 ft.; *Rathbun*, $ 2½-5, R. from $ 1; *Langwell*, $ 2-3½; *Delevan*, $ 2), a town with (1905) 34,685 inhab., contains rolling mills, the car-shops of the Erie Railroad, a Female College, and an Academy of Science. The *Elmira Reformatory* has played an important part in the reformatory treatment of criminals.

Railways radiate hence to *Watkins Glen* (p. 134) and *Rochester* (p. 135), to *Ithaca* (p. 145) and *Canastota* (p. 132), to *Harrisburg* (p. 189) and *Philadelphia* (p. 158), and through the *Lehigh Valley* (p. 182).

282 M. *Corning* (950 ft.; Dickinson Ho., $ 2), with (1905) 13,515 inhab., is the junction of lines to Rochester (p. 135) and Williamsport (p. 185). At (326 M.) *Wayland* (1360 ft.) we part company with the Erie line, which here turns to the N. 334 M. *Dansville* (1040 ft.; Jackson Sanitarium, $ 3½-5); 365 M. *Rochester & Pittsburg Junction*, for lines to the N. to Rochester and to the S. to Pittsburg.

410 M. **Buffalo**, see p. 136.

From Buffalo to *Niagara Falls*, see p. 139 or p. 144.

d. Viâ Erie Railroad.

445 M. Erie R. R. to (425 M.) *Buffalo* in 11-12½ hrs. (fare $ 8; parlor-car or sleeper $ 2); to (445 M.) *Suspension Bridge* in 12-15 hrs. (same fares).

The train starts from *Jersey City* (comp. p. 10; ferries from 23rd St. and Chambers St.). — This line, constructed in 1836-52, passes some fine scenery in penetrating the Allegheny Mts.

Jersey City, see p. 73. The train threads the *Bergen Tunnel* (p. 140) and traverses the *Salt Marshes of the Hackensack*.

These extensive marshes are covered with reeds and sedge grass, growing in soft mud, which is sometimes 40 ft. deep. They are overflowed at high tide.

Beyond (10 M.) *Rutherford* we cross the *Passaic*. 13 M. *Passaic*, 17 M. *Paterson* (see p. 140). At (32 M.) *Suffern* (300 ft.) we enter *New York State* (p. 141). — 34 M. *Ramapo*, in the picturesque valley of that name. — 39 M. *Tuxedo*.

About 1½ M. to the W. is Tuxedo Lake, the property of the *Tuxedo Park Association*, a club of New Yorkers, who have made this one of the most fashionable pleasure-resorts and game-preserves in the country. On the shores of the lake are the club-house and the cottages of members. A good golf-course has been laid out.

48 M. *Turner's* (558 ft.; Rail. Restaurant) is the junction of a line to Newburgh (p. 90). — 50 M. *Monroe* (Monroe Hotel, $ 2).

About 10 M. to the S. lies *Greenwood Lake (625 ft.), a favourite resort of hunters and fishermen, 9 M. long and 1 M. wide, also reached by a direct railway from Jersey City. The chief hotels are the *Brandon House* ($ 2½), in *Greenwood Lake Village*, the *Windermere* ($ 2½-3), and *Waterstone Cottage*, all at the N. end of the lake, and the *Ferncliff* and *Lakeside Hotels* ($ 3), on the W. bank. The lake is surrounded by well-wooded hills, attaining a height of 1500 ft.

60 M. *Goshen*, junction for Kingston and Rondout (p. 90); 68 M. *Middletown* (560 ft.; Madison Ho., $ 2; Rail. Restaurant), with (1905) 14,515 inhab., junction of the N. Y., O., & W. R. R. to *Oswego* (comp. R. 29 e). Beyond (71 M.) *Howells* the line ascends the *Shawangunk* or *Kittatinny Range*, and the scenery improves. Beyond (76 M.) *Otisville* the train reaches the summit (870 ft.) by a long

rocky cutting and begins to descend rapidly into the valley of the *Delaware.*

89 M. **Port Jervis** (440 ft.; *Fowler Ho.*, from $ 2; *Delaware Ho.*, from $ 1½), situated at the junction of the Delaware and the *Neversink*, is a village of (1905) 9695 inhab., frequented as a summer-resort.

At Port Jervis the Delaware abruptly changes its course from S.E. to S.W. and runs hence, parallel to the Allegheny Mts., to (42 M.) the Delaware Water Gap, where it again turns to the S.E. in breaking through the Blue Ridge. A fine road, much frequented by motorists, runs along the river at the foot of the shaly bluffs on the right bank; and the scenery of this section of the Upper Delaware, in *Pike County (Pa.), is deservedly famous and much visited by artists. Numerous picturesque falls and gorges are formed by the streams descending from the highest part of the ridge, here known as the *Pocono Mts.* (comp. p. 141), to the Delaware. Among the chief points on the road are the following. — 8 M. Milford (*Fauchere*, $ 3; *Bluff Ho.*, $ 2½-3), near the mouth of the *Sawkill*, the beautiful falls of which are ¾ M. distant. Close by is an experimental station of the Yale School of Forestry. *Otter's* or *Utter's Cliff* (800 ft.), to the S. of Milford, affords a fine view of the valley, with the blue wall of the Kittatinny Mts. (see below) bounding the view to the S.W. Just below this point the river is joined by *Adams Brook*, poplar with artists for its wild scenery. — 12 M. Mouth of the *Raymondskill*, with a fine cataract, 1½ M. back from the river. — 18 M. Dingman's Ferry (*High Falls Ho.*, $ 2-3), at the mouth of *Dingman's Creek*, with an old ferry and a ruined bridge. There are several small falls near the village, and 3 M. up the creek is *Childs Park*, in a lovely little glen with a fine waterfall. *Silver Lake* is 3 M. farther up, near the headwaters of the stream. — 22 M. *New Egypt* (inns), on *Tom's Creek*, a famous angling stream. — 27 M. Bushkill (*Peters Ho.*, *Riverside Ho.*), at the confluence of the *Big* and *Little Bushkill Creeks*. The falls of the latter (2 M.) are the most beautiful in the district. The Delaware here makes the famous 'Walpack Bend' or 'Fiddler's Elbow', shaped like the letter S. — At (36 M.) *Marshall's Creek*, also with a fall, the highroad to *Stroudsburg* (p. 141) diverges to the right (inland). — 42 M. *Delaware Water Gap*, see p. 140.

The *Tri-States Rock*, to the S. of Port Jervis, marks the meeting of New York, New Jersey, and Pennsylvania. — Among other picturesque resorts within easy reach of Port Jervis are *High Point* (1600 ft.; The Inn, $ 4) and *Lake Marcia*, 4 M. to the E., on the ridge of the *Kittatinny Mts.* (see p. 142; coach).

From Port Jervis the *N. Y., Ontario, & Western Railway* runs to (24 M.) *Monticello* (1700 ft.; Rockwell, $ 2-3; Mansion Ho., $ 2) and viâ (22 M.) *Summitville* (p. 230) to (55 M.) *Kingston* (p. 90).

Beyond Port Jervis the train crosses the Delaware into *Pennsylvania* ('Keystone State') and runs along its right bank, high above the river. Great engineering difficulties were overcome in making this part of the line, where the river-gorge is deep and tortuous. At (111 M.) *Lackawaxen* (650 ft.) the Delaware and Hudson Canal crosses the Delaware by an aqueduct. Like most of the other small stations in the '*Delaware Highlands*', this is a summer-resort with several unpretending hotels and boarding-houses.

At (117 M.) *Mast Hope* we recross the river and re-enter New York. About 4 M. to the W. is the domain of the *Forest Lake Association* (1500 ft.). — At (123 M.) *Narrowsburg* the valley is very narrow. Beyond (177 M.) *Deposit* (1010 ft.) we quit the Delaware, turn to the left (S.W.), and begin to ascend the ridge separating it from the Susquehanna. Fine scenery. From (185 M.) *Gulf Summit*

(1375 ft.) we descend rapidly, soon obtaining a fine *View of the *Susquehanna* (right). We cross the *Cascade Bridge* (180 ft. high) and the *Starrucca Viaduct*, 1200 ft. long and 110 ft. high. 193 M. *Susquehanna* (915 ft.), with railway repair-shops, lies on the left bank of the river. — The line now descends through the Susquehanna Valley. Beyond (216 M.) *Binghamton* (865 ft.; p. 141) it runs parallel with the Lackawanna Railway (R. 12c), on the opposite (right) bank. 238 M. *Owego* (p. 141); 274 M. *Elmira* (p. 142). At (292 M.) *Corning* (950 ft.; p. 142) a branch-line to Rochester (p. 135) runs to the right (N.).

At (333 M.) **Hornell** (1160 ft.; *Sherwood, Osborne Hotel, Page Ho.*, $2-2½; *Rail. Restaurant*), a town of (1905) 13,260 inhab., with railroad works, the Buffalo branch diverges to the right from the main line, which goes on to (414 M.) *Salamanca* and (461 M.) *Dunkirk* (p. 231). — 363 M. *Portage* (1315 ft.; Ingham Ho., $2) is the station for the ***Portage Falls**, formed by the *Genesee River*.

The *Upper* or *Horseshoe Falls*, 70 ft. high, are ¾ M. below the village. About ¼ M. farther down are the *Middle Falls*, 110 ft. high, with a cave called the 'Devil's Oven' in the rocks near the foot of the precipice. For 2 M. farther the river descends through a narrow rocky defile and then reaches the *Lower Falls* (150 ft.).

The train crosses the Genesee by a bridge 235 ft. high, affording a view of the Upper and Middle Portage Falls. 367 M. *Castile* (1400 ft.); 370 M. *Silver Springs*, 6 M. from *Silver Lake;* 394 M. *Attica* (1000 ft.); 422 M. *Clinton Street* (*East Buffalo;* 610 ft.).

425 M. **Buffalo**, see p. 136.

The trains for Niagara Falls follow practically the same route as the N. Y. C. R. R. (p. 139). 433 M. *Tonawanda;* 439 M. *La Salle;* 444 M. *Niagara Falls* (p. 146); 445 M. *Suspension Bridge* (p. 145). We cross the bridge (comp. p. 358) and connect at (446 M.) *Niagara Falls, Ontario* (p. 363), with the Grand Trunk Railway of Canada.

e. Viâ Lehigh Valley Railroad.

464 M. Lehigh Valley R. R. to (451 M.) *Buffalo* in 11½-12½ hrs. (fare $8; sleeper $2); thence to (464 M.) *Suspension Bridge* in 1 hr. more (same fares). — The line starts from the Pennsylvania Station in *Jersey City* (p. 10; ferries from Cortlandt, Desbrosses, and W. 23rd Sts.). This is a very picturesque route. The 'Black Diamond Express' leaves at 11.55 a.m.

Jersey City, see p. 73. — The first section of this line follows practically the same route as the Central of New Jersey R. R. (p. 10). 9 M. *Newark* (p. 156); 13 M. *Elizabeth Junction;* 27 M. *South Plainfield;* 33 M. *Bound Brook* (p. 158). Beyond (64 M.) *Pattenburg*, in the midst of a peach-orchard district, we thread the *Musconetcong Tunnel*, nearly 1 M. in length. At (76½ M.) *Philippsburg*, an iron-making town and railway-junction, we cross the *Delaware* and enter *Pennsylvania*.

77½ M. **Easton** (**Paxinosa Inn*, from $3; *Huntington*, $3; *United States Ho.*, $2½-3), at the *Forks of the Delaware*, an in-

dustrial town of 25,238 inhab., is the site of *Lafayette College*, a well-known Presbyterian institution (440 students), founded in 1826. It is an important railway-centre (p. 140). The *Carnegie Library* is one of the prominent buildings. The Paxinosa Inn (p. 144) is a favourite summer-resort, 2 M. above the town (electric car).

89½ M. **Bethlehem**, and thence to (451 M.) **Buffalo**, see R. 19. — Hence to *Niagara Falls*, see p. 139. The direct route diverges at *Batavia* (comp. p. 135). — 464 M. *Suspension Bridge*, see p. 144.

13. From Auburn to Ithaca.

43 M. Lehigh Valley Railroad in 1¾ hr. (fare $ 1.10). — An *Electric Railway*, with hourly service, is to be opened soon.

Auburn, see p. 133. — The line runs towards the S.W. From (7 M.) *Cayuga Junction* a short branch-line runs to (4 M.) *Cayuga* (p. 133). Our line now runs along the E. bank of ***Cayuga Lake** (390 ft.), a charming sheet of water 38 M. long and 1-4 M. wide, enclosed by hills rising 600-700 ft. above the water-level, and affording good fishing, boating, and bathing. Steamers ply upon the lake, the favourite resort on which is the *Cayuga Lake House* ($ 2½-5; W. bank, Sheldrake P. O.). — 10 M. *Union Springs;* 17 M. *Aurora*, the seat of the Wells College for Women (170 students).

43 M. **Ithaca** (400 ft.; *Clinton House*, $ 2-2½, well spoken of, *Ithaca Hotel*), a flourishing city with (1905) 14,615 inhab., lies amid picturesque scenery at the head of Cayuga Lake, partly on the level shore and partly on the adjoining heights. It is best known as the seat of *Cornell University (President, *Dr. J. G. Schurman*), one of the leading colleges of America (co-educational; 530 teachers, 4650 students).

The university is munificently endowed, and its buildings, splendidly situated 400 ft. above the lake (*View), are handsome and capacious. It owes its foundation to the bounty of New York State, the National Government, and *Ezra Cornell* (1807-74). Besides the usual academic and professional branches, the educational course includes agriculture, the mechanic arts, veterinary surgery, and military tactics. For the medical department, see p. 53. The campus, which covers 200 acres, is perhaps the most beautiful in the country. Among the most prominent buildings are the huge *Goldwin Smith Hall* (1907; with an interesting archæological museum), the *Library* (350,000 vols.; important Dante, Petrarch, and Icelandic collections), the **Sage Chapel* (with fine mosaics, stained glass, and memorials), and the *Sage College* (for women). The *Hydraulic Laboratory* on Fall Creek (see below) is very interesting.

Visitors should make the 'Loop Ride' by electric car (Stewart Ave. line; fare 5 c.), which takes in the University Campus, Cornell Heights, Llenroc (the home of Ezra Cornell, see above), and Renwick Beach, affording fine views of the lake and of the gorges of Fall and Cascadella Creeks, with their waterfalls (e.g., *Ithaca Fall*, 120 ft. high).

The romantic environs of Ithaca, which Ludwig Fulda describes as combining the beauties of the Black Forest with those of the Lake of Zürich, contain many more pretty waterfalls, the finest of which is the

*Taghanic or Taughannock Fall, which is about 9 M. to the N. of Ithaca and 1½ M. to the W. of the lake. The stream here forms a ravine, with rocky sides 200-400 ft. high, and plunges perpendicularly over a table-rock to a depth of 215 ft., presenting the highest waterfall E. of the Rockies (50 ft. higher than Niagara). There is a hotel near the fall, and it may be reached by road, railway, or water.

From Ithaca (East Ithaca station) to Freeville, 9 M., *Lehigh Valley R. R.* in ½ hr. (fare 25 c.). — *Freeville* (Inn, small) is the seat of the *George Junior Republic, established by Mr. William R. George in 1895. This is a miniature republic, modelled on the government of the United States, the citizens of which (ca. 160 in number) are boys and girls between the ages of 14 and 21. The republic has its own legislature, court-house, jail, school, church, and public library, and its citizens elect their rulers, make and enforce laws, and carry on business just as adults do in the greater world. Its grounds (350 acres) are cultivated by the boys. The legal status of the republic is similar to that of a State Reformatory. This interesting experiment seems to work well, and a visit to Freeville rivals in sociological interest that to Ellis Island (p. 72). Those interested in the work may become members of the George Junior Republic Association for an annual fee of $ 5. Communities on a similar plan have also been established in various other states.

From Ithaca to *Philadelphia* and to *Buffalo*, see R. 19a.

14. Niagara Falls.

Railway Stations. *New York Central* (Pl. C, 4), cor. of Falls St. and Second St., also used by the Michigan Central, West Shore, Lehigh Valley, and the R. W. & O. railways; *Erie Depot* (Pl. C, 4), cor. of Niagara St. and Fourth St. — The Canadian lines make connection for Niagara Falls at *Suspension Bridge* (Pl. C, 1), 2 M. to the N.; and there are also stations on the Canadian side at *Niagara Falls* (*Ontario;* Pl. B, 1), *Victoria Park* (Pl. A, 3), and *Falls View* (Pl. A, 6; comp. p. 358). — Niagara Falls, N. Y., is also connected with Suspension Bridge by tramway (5 c.).

Hotels. International Hotel (Pl. a; B, 4), Cataract Hotel (Pl. b; B, 4), $ 3-5½, both under one management and open in summer only (all meals served in the International); Kaltenbach (Pl. d; C, 4), German, well spoken of, from $ 3; Prospect House (Pl. c; C, 4), well spoken of, $ 3½-5½; Imperial (Pl. e; C, 4), $ 2½-4; Tower (Pl. f; B, 4), $ 2½-4. These are all on the American side, in the city of *Niagara Falls.* — *Clifton House (Pl. h; A, 4), on the Canadian side, near the Upper Steel Arch Bridge, with a fine view of the Falls, from $ 4, with bath from $ 5; Lafayette (Pl. g; A, 3), opposite the Canadian end of the Upper Steel Arch Bridge, $ 3, both open all the year round.

Carriages. The former extortionate charges and impertinent demeanour of the Niagara hackmen have been somewhat abated, but the cab-touts on the trains and at the station are scarcely to be trusted. The rates are $ 1½ for the first and $ 1 for each addit. hr., with two horses $ 2 and $ 1½; but it is always advisable to make a distinct bargain with the driver, and lower terms than the legal rates may often be obtained, especially by a party. It should be expressly stipulated who is to pay the tolls in crossing the bridges, etc.; and the driver should be strictly enjoined not to stop at any of the bazaars or other pay-places unless ordered to do so. A single-horse conveyance should not cost more than $ 3 for half-a-day or $ 5 for a whole day and small carriages for 1-2 pers. are generally obtainable for $ 1 per hour. — *Park Vans* make the round of the American Reservation at frequent intervals (fare 25 c., for Goat Island 15 c.), and passengers are entitled to alight at any number of points and finish the round by any subsequent vehicle on the same day. — *Omnibus* from the station to the hotels 25 c.

Electric Tramways. The International Railway runs along the Canadian bank from *Queenston* (p. 153; see Pl. B, 1) to (11½ M.) *Chippawa* (beyond Pl. C, 6; p. 152; fare 45 c.), taking 1½ hr. to the trip and stop-

NIAGARA FALLS
1 : 31,000
Feet
Metres
Queenston
Whirlpool
Niagara Beach
Suspension Bridge Depots
Lower Steel Arch Br.
Cantilever Br.
Niag. Falls Str.
Bridge Street
Clifton
Niagara Falls
Wesley Park
Victoria Park Sta.
Upper Steel Arch Bridge
Prospect Park
American Falls
Chapin's I.
Robinson's I.
Green I.
Blackbird I.
American Rapids
Goat Island
Parting of Waters
Three Sister Islands
Hermits Cast.
Little Brother I.
Horse Shoe Falls
Table Rock
Terrapin Rock
Porter's Bluff
Biddle Stairs
Inspir. Pt.
Robinson St.
Murray St.
Falls View Sta.
Canadian Rapids
Niagara River
Great Gorge Route
Belt Line
Niag. Falls Brewery
Erie Dep.
Hydraulic
N.Y.C. Dep.
Tunnel
N.Y.C. & H.R.R.R.
Nat. Food Co.
Loop Drive
Oakwood Cemetery
Public Libr.
Lockport St.
Pierce Ave.
Whitney Ave.
Chilton St.
Ashland Ave.
Elmwood Ave.
Spruce Ave.
Cedar Avenue
Pine Street
Walnut Street
Ferry Street
Falls Street
Portage Street
Linwood Ave.
La Salle St.
Division St.
Superior St.
Ontario Ave.
Niagara Ave.
Cleveland Ave.
South Ave.
Ellis Street
Simcoe St.
South St.
Moore Street
Clifton Street
Central St.
Ferry Road
Queen Victoria Niagara Falls Park
Portage Road
Grand Promenade
Grand Rapids Drive
Elec. Develop. Co.
Platform Casc.
Ont. Power Co.
Dam
Dufferin Islands
Buffalo
Chippawa
Detroit, Chicago
Wagner & Debes' Geog. Estab. Leipzig.

ping at *Brock's Monument* (10 c.), the *Whirlpool* (20 c.), *Niagara Falls Town* (25 c.), *Niagara Falls Park* (30 c.), and *Dufferin Islands* (30 c.). The NIAGARA GORGE RAILROAD *(Great Gorge Route)*, on the American side, runs through the gorge and along the brink of the river to (7 M.) *Lewiston* (p. 153; fare 50 c., there and back 75 c.) and thence on to *Youngstown* and (14 M.) *Fort Niagara* (p. 153; 65 c., 95 c.). — These lines afford admirable views of the rapids, gorge, and falls. Visitors are recommended to take the Canadian line to Queenston, cross the suspension bridge to Lewiston, and return on the American side (or vice versâ; round-trip fare $ 1). This is known as 'The Niagara Belt Line'. Evening excursions are sometimes arranged, with search-light effects on the rapids and whirlpool. 'Stop-overs' are allowed on these lines without extra charge. — An electric railway also runs from Niagara to *Buffalo* (comp. p. 139).

Fees. Since the establishment of the American and Canadian National Parks and Reservations, most of the former extortionate fees have been abolished; and any visitor who is able to walk a few miles can see all the chief points at very little cost. Goat Island and all the best views of the Falls are free; and the only extra expenses which the visitor is advised to incur are the trip in the '*Maid of the Mist*', including the visit to the Canadian side (50 c.), the *Cave of the Winds* ($ 1; or the similar trip on the Canadian side, 50 c.), and the view of the *Whirlpool Rapids* (50 c.).

Photographs. Among the best photographs of Niagara are those of *Zybach & Co.*, Niagara Falls, Ontario (p. 363).

Reservations. The *New York State Reservation at Niagara* comprises 107 acres and was opened in 1885. It includes *Prospect Park* and *Goat Island*. — The *Queen Victoria Niagara Falls Park*, extending along the river on the Canadian side, all the way from Lake Erie to Lake Ontario, covers 787 acres; the Park Reservation in the immediate neighbourhood of the Falls contains 196 acres.

Plan and Season of Visit. The description in the text follows the best order in which to visit the Falls. The American side is seen to greatest advantage in the morning, the Canadian side in the afternoon, the sun being then at our backs as we face the Falls. The Whirlpool Rapids are best seen from the Canadian side. It is possible to see all the chief points in one day, but it is better to allow 2-3 days for the visit. The first half of June, the second half of Sept., and Oct. are good seasons to visit Niagara, which is hot and crowded in midsummer. No one who has an opportunity to see them should miss the Falls in the glory of their winter dress.

The **Falls of Niagara ('Thunder of Waters'), one of the greatest and most impressive of the natural wonders of America, are situated on the *Niagara River*, 22 M. from its head in Lake Erie and 14 M. above its mouth in Lake Ontario. This river forms the outlet of the four great Western lakes (Erie, Huron, Michigan, and Superior), descending about 330 ft. in its course of 36 M. and affording a channel to a large part of the fresh water in the globe. Its current is swift for about 2 M. after leaving Lake Erie, but becomes more gentle as the channel widens and is divided into two parts by *Grand Island* (p. 153). Below the island the stream is $2\frac{1}{2}$ M. wide. About 15 M. from Lake Erie the river narrows again and the rapids begin, flowing with ever increasing speed until in the last $\frac{3}{4}$ M. above the Falls they descend 55 ft. and flow with immense velocity. On the brink of the Falls, where the river bends at right angles from W. to N., the channel is again divided by *Goat Island*, which occupies about one-fourth of the entire width of the river

(4770 ft.). To the right of it is the *American Fall, 1000 ft. wide and 167 ft. high, and to the left of it is the **Canadian or Horseshoe Fall, 158 ft. high, with a contour of 2550 ft. The volume of water which pours over the Falls is 12 million cubic ft. per minute (about 1 cubic mile per week), of which fully nine-tenths go over the Canadian Fall.† The cloud of spray and vapour hanging over the Falls is visible for miles. The Falls descend into a basin about 100 ft. deep, thoug farther down it reaches a depth of 192 ft. Here the so-called 'Ice Bridge' often forms in winter, from the regelation of floes carried over the Falls. The gorge is here about 1250 ft. in width. Two miles farther down it is barely 800 ft. wide, and at the Whirlpool Rapids (p. 152), with a descent of 50 ft., the huge volume of water is compressed into a space of less than 300 ft. Within 7 M. the various lower rapids descend 100 ft., but at Lewiston the river once more becomes wider and smoother.

The gorge through which the river runs has been formed by the action of the vast body of water rushing through it, and the Falls themselves are receding up the river at a mean rate which in 1842-1905 averaged 4.2 ft. per annum. The rocks passed through by the receding falls are limestone, shale, and sandstone. At present the formation over which the water pours is limestone, with shale lying 80-90 ft. below it; and the frequent fall of great masses of limestone rock is undoubtedly occasioned by the erosion of the underlying shales. At the Whirlpool the continuity of the rock-formation is interrupted, and the end wall of the ravine is formed of drift. The lower three miles of the gorge required 35,500 years for its formation, while the upper four miles required only 3500 years, — due to great change in physical condition. Comp. 'The Falls of Niagara', by *J. W. W. Spencer* (1907).

Niagara Falls appear under the name of Ongiara in Sanson's Map of Canada (Paris, 1657), but the first white man known to have seen Niagara Falls was *Father Hennepin*, a member of La Salle's party in 1678. He described them as 'a vast and prodigious Cadence of Water, which falls down after a surprizing and astonishing manner, insomuch that the Universe does not afford its Parallel. . . . The Waters which fall from this horrible Precipice do foam and boyl after the most hideous manner imaginable, making an outrageous Noise, more terrible than that of Thunder; for when the Wind blows out of the South, their dismal roaring may be heard more than 15 leagues off.' The sketch he made of the Falls shows several points of difference from their present state.

The Indians have a tradition that the Falls demand two human victims every year; and the number of accidents and suicides is more than large enough to maintain this average. Many lives have been lost in foolhardy attempts to cross the river above Goat Island.

The American city of **Niagara Falls** (hotels, see p. 146) closely adjoins the river and in 1905 contained 26,560 inhab. (as compared with 5502 in 1890). The chief source of its prosperity has long been the influx of sightseers; but it is now, thanks to the tapping of the Falls by tunnels and power canals, rapidly becoming an industrial centre of great importance. It is estimated that about 700,000 tourists visit the Falls yearly.

Within the past few years the authorities of Canada and the United States have authorized the subtraction of water from Niagara for in-

† The international boundary passes near Terrapin Rock (p. 150), thus leaving a small part of the Horseshoe Fall in American territory.

dustrial purposes to the extent of no less than 750,000 horse-power and already 80,000 horse-power is ready for use on the Canadian side and 140,000 horse-power on the American side. So far the general appearance of the Falls has been little marred by these operations (except for the intrusion of power-houses and distributing stations on the Canadian shore); but a good deal of apprehension exists as to the possible diminution of the grandeur of Niagara, and it is hoped that an international agreement may be arrived at to secure a *modus operandi* that will satisfy at once the demands of the industrialists and those of the lovers of natural beauty. On the American side a tunnel (Pl. B-D, 4), 29 ft. deep and 18 ft. wide, has been excavated through the solid rock from a point just below the Upper Steel Arch Bridge to a point about 1¼ M. above the Falls, where it is 165 ft. below the level of the river. It passes below the city at a depth of about 200 ft. A short canal diverts a portion of the river to the head of the tunnel, where a maximum of 120,000 horse-power is attained. A similar tunnel on the Canadian side is 2000 ft. long, 26 ft. high, and 23½ ft. wide. The largest steel flume in the world, 18 ft. in diameter, runs below the Canadian National Park, carrying enough water to develop 60,000 horse-power. The farthest point to which the power of Niagara has so far been transmitted is Syracuse, 160 M. distant. The power derived from Niagara is used not only in manufacturing but also for hundreds of miles of electric railways and the lighting of several towns.

The traveller should undoubtedly visit one of the power-houses, where he will receive an impression of weird force hardly unworthy of mention beside that produced by the Falls themselves. The intake-canals, the wheel-pits, the huge 'penstocks' or vertical inlet-pipes, the turbines, the generators, etc. are full of interest even for the non-professional visitor. The power-house of the *Niagara Falls Co.* (beyond Pl. D, 4; 80,000 horse-power; adm. 25 c.; guide) on the American side, is easily reached by the Buffalo trolley or any of the cars marked 'Power House'. The *Ontario Power Co.* (p. 151; 50 c.) and the *Canadian Niagara Power Co.* (Pl. A, 6; 25 c.), both on the Canadian side, also admit visitors. With the Niagara Falls Co. Power House may be combined a visit to the *Natural Food Conservatory* (Pl. C, 4, 5), in Buffalo Ave., where the well-known shredded-wheat biscuits are made. Besides the processes of manufacture, the visitor will find many features of interest in the arrangement of the factory, including the employees' dining-room, the marble bathroom, and the auditorium. Guides are provided to show visitors over the huge building (no charge). Splendid view from roof-observatory.

We may begin our visit to the Falls by entering **Prospect Park** (Pl. B, 4), 12 acres in extent, which adjoins the gorge close to the American Fall. At **Prospect Point*, protected by an iron parapet, we stand on the very brink of the Fall and see it dash on the rocks below. *Hennepin's View*, a little to the right (N.), commands a good general *View. Near the point is the *Superintendent's Office*, whence an *Inclined Railway* (5 c.) and a *Flight of Steps* descend to the bottom of the gorge and the dock of the 'Maid of the Mist' (see p. 151).

Following the parkway to the left (W.) from Prospect Point, we reach (3 min.) the *Goat Island Bridge* (360 ft. long), crossing the right arm of the river, a little above the American Fall. It commands a fine view of the **Upper Rapids*. To the right are several little rocky islets, including *Avery's Rock*, where an unfortunate man found foothold for 18 hrs. before being swept over the fall by the impact of a boat let out with ropes in an attempt to save him. The bridge ends at *Green Island*, whence another short bridge crosses to ***Goat Island** (Pl. B, 5; 80 acres in extent). Here we follow the path to the right to (4 min.) **Luna Island*, a rocky islet between the main

American Fall and the **Centre Fall*, named from the lunar rainbows seen here at full moon. The continuation of the path along the W. side of Goat Island leads in a minute or two more to the *Biddle Stairs* (free) and the office where a guide and complete change of dress are obtained for a descent to the **Cave of the Winds** (Pl. 'C. of W.', B 5; fee $ 1; small gratuities expected).

Everyone should descend the stairs and follow the path along the foot of the cliffs towards the base of the Centre Fall, but only those of strong nerves should attempt the trip through the Cave of the Winds, which, however, is said to be safe and is often made by ladies. For those who can stand it the experience is of the most exciting and pleasurable description. After passing over the gangways and bridges amid the rocks and spray in front of the Centre Fall, we are conducted through the 'Cave of the Winds' behind it, where the choking, blinding, and deafening tumult of wind and water defies description. The visitors grasp each other by the hand and sidle through on a narrow ledge, with a perpendicular wall of rock within an inch of their noses and the mighty volume of the fall at their backs.

Beyond the Biddle Stairs the path on Goat Island leads to (4 min.) *Porter's Bluff*, overlooking the Horseshoe Fall, the Canadian Rapids, and the ravine below the Falls. A staircase and bridge descend hence to ***Terrapin Rock* (Pl. A, 5), on the edge of the Horseshoe Falls, affording the best view of these from this side.

'The river here is evidently much deeper than the American branch, and instead of bursting into foam where it quits the ledge, it bends solidly over and falls in a continuous layer of the most vivid green. The tint is not uniform, but varied, long strips of deeper hue alternating with bands of brighter colour ... From all this it is evident that beauty is not absent from the Horseshoe Fall, but majesty is its chief attribute. The plunge of the water is not wild, but deliberate, vast, and fascinating' *(Tyndall)*.

Our path next leads along the S. side of Goat Island to (7-8 min.) the series of bridges leading to the **Three Sister Islands* (Pl. B, 5), which afford the best view of the imposing **Canadian Rapids** (Pl. A, 5, 6), running at the rate of 30 M. an hour. The Third Sister is adjoined by a smaller rock known as the *Little Brother*.

We may now return through the centre of Goat Island to (5 min.) the bridge leading to the mainland, but those who have time should follow the path to (4 min.) the 'Parting of the Waters' at the head of Goat Island (Pl. C, 5), where we obtain a good view of the broad and quiet river above the cascades, with *Grand Island* (p. 153) in the background. Thence the path leads back along the N. side of Goat Island, affording a view of the *American Rapids*, to (5-6 min.) the bridge.

We may now cross to the Canadian side of the river by the **Upper Steel Arch Bridge** (Pl. B, 4), about 250 yds. below the American Fall (see p. 152), erected in 1897-98 to take the place of the suspension-bridge formerly at this spot. The main span, the largest of the kind in the world, is 840 ft. long, while the flanking spans rincease the total length of the bridge to 1240 ft. It is 49 ft. wide. An electric tramway crosses in the centre, and on each side are

carriage-ways and footpaths. The bridge is 195 ft. above the level of the water. Bridge-toll 10 c., incl. tramway fare. — Just below the bridge, on the American shore, is the mouth of the tunnel described at p. 149. On the bank above is a group of mills and manufactories, run by the power of a surface canal.

On reaching the Canadian end of the bridge, we turn to the left and reach (3 min.) ***Queen Victoria Niagara Falls Park** (Pl. A, 4-6), which extends along the river for 2½ M. (electric railway, see p. 146). The park contains a bronze statue (by Dunbar) of *Colonel Gzowski* (1813-99), its chief promotor. As we proceed splendid general views are obtained of the Falls and the gorge, especially from the (3 min.) **Rambler's Rest* (Pl. A, 4) and (4 min.) **Inspiration Point* (Pl. A, 4). To the right, 3-4 min. farther on, are *Picnic Grounds* and a *Restaurant;* and in 3 min. more we reach the entrance to the power-house of the *Ontario Power Co.* (Pl. A, 5). Just beyond are the *Table Rock House* and ***Table Rock** (Pl. A, 5), which affords an indescribably grand view of the Horseshoe Falls. Beautiful rainbows are seen on the spray in the afternoon. The roar of the water is deafening.

The name of Table Rock still adheres to this point, though the last portion of the overhanging ledge that gave rise to it fell into the abyss in 1850. — An elevator here affords an opportunity to those who wish to go under the Falls (25 c., with dress 50 c.). This trip does not necessitate the removal of clothing, but only the protection of oil-skin suits. It has been improved by the construction of a tunnel (200 ft. long) and now affords imposing *Views of the falls from behind and below.

The walk through the Park above the Falls to (3-4 min.) *Cedar Island* and (1 M.) *Dufferin Islands* (Pl. B, 6) has now lost much of its attraction owing to the transformation wrought by the Power Companies. No time need be wasted on the so-called *Burning Spring* (adm. 50 c.). — *Falls View Station* of the Michigan Central R.R. (Pl. A, 6; see p. 358), lies just outside the Park. — A road diverging near Table Rock leads to *Lundy's Lane*, where a bloody but somewhat indecisive struggle took place on July 25th, 1814, between the Americans and the Anglo-Canadians. The latter, however, were left in possession of the field, the Americans retiring on Fort Erie. A monument has been erected to the Canadians who fell in the battle.

No one should omit to take the ***Trip* in the little steamer the *Maid of the Mist*, which starts near the foot of the Inclined Railway descending from the end of Prospect Park (see p. 149), steams up the river nearly to the foot of the Horseshoe Fall, and touches at a wharf on the Canadian side (fee 50 c., incl. water-proof dress). The view it affords of the Falls is one of the best to be had; and the trip is perfectly safe. Passengers may disembark on the Canadian side (where an incline ascends to the National Park) and return by any later trip of the steamer the same day.

The river and its banks below the bridge offer many points of great interest. The Lower Rapids and the Whirlpool (p. 152) are both seen to greatest advantage from the Canadian side.

From the N. end of the bridge we follow the road (electric railway, see p. 146) descending along the edge of the cliff to (2 M.) the ***Cantilever Bridge** (Pl. B, C, 1) of the *Michigan Central Railroad*,

completed in 1883. It is entirely of steel and has a total length of 900 ft. The two cantilever arms, 395 ft. and 375 ft. long, are connected in the centre by a fixed span of 125 ft. It is 245 ft. above the water. About 100 yds. below this bridge is the ***Lower Steel Arch Bridge** (Pl. B, 1) of the *Grand Trunk Railway*, erected in 1897 on the site of the former *Railway Suspension Bridge*, with a roadway below the railroad track (toll 10 c., incl. return). The length of the bridge, including approaches, is 1100 ft., half of which is absorbed by the arch itself. The highest point is 226 ft. above the water. It commands a fine view of the Whirlpool Rapids, but the Falls are partly hidden by the Cantilever Bridge.

A little below the Lower Steel Arch Bridge is the entrance to the *Rapids Park*, where we descend an Inclined Railway (50 c.) to the ***Whirlpool Rapids**, which in their own way are as wonderful as the Falls. The immense volume of water is here forced to flow through a channel (300 ft.) so narrow and so impeded with rocks, that it actually assumes a convex form, the centre of the river being much higher than the edges. Three other elevators (each 50 c.) descend to the Rapids on the American side.

It was in an effort to swim down these Rapids that Capt. Webb lost his life in 1883, but since then several persons have passed through them safely in barrels. The old 'Maid of the Mist' was successfully piloted through the Rapids to Lewiston in 1861. Blondin and others have crossed the gorge above the Rapids on ropes of hemp or wire.

Near the wooden staircase ascending to the *Devil's Hole* is a tablet commemorating an Indian massacre in 1763.

We may now cross the railway-bridge and return along the American side (tramway, see p. 147).

About 1 M. below the Railway Bridge is the ***Whirlpool** (1150 ft. in diameter; beyond Pl. B, 1), of which we get a good distant view from the top of the cliff. The river here bends suddenly at right angles to its former course, and the Whirlpool is occasioned by the full force of the current impinging against the cliffs of the left bank.

'Here, within the compass of a mile, those inland seas of the North, Superior, Huron, Michigan, Erie, and the multitudes of smaller lakes, all pour their floods, where they swirl in dreadful vortices, with resistless undercurrents boiling beneath the surface of that mighty eddy. Abruptly from this scene of secret power, so different from the thunderous splendours of the cataract itself, rise lofty cliffs on every side, to a height of two hundred feet, clothed from the water's edge almost to their crests with dark cedars. Noiselessly, so far as your senses perceive, the lakes steal out of the whirlpool, then, drunk and wild, with brawling rapids roar away to Ontario through the narrow channel of the river. Awful as the scene is, you stand so far above it that you do not know the half of its terribleness; for those waters that look so smooth are great ridges and rings, forced, by the impulse of the currents, twelve feet higher in the centre than at the margin. Nothing can live there, and with what is caught in its hold, the maelstrom plays for days, and whirls and tosses round and round in its toils, with a sad maniacal patience'. *(Howells.)*

The River Road ascends along the American side of the river from Goat Island Bridge to (1 M.) the *Old French Landing*, where La Salle and Father Hennepin (p. 148) are said to have embarked in 1678 after their portage from Lewiston. Nearly opposite, on the Canadian shore, is the village of *Chippawa*, where the Americans defeated the English in 1814. This is the

terminus of the Electric Railway (p. 146). About 1 M. farther up is the *Schlosser Landing*, fortified by the French in 1750 and by the English in 1761. *Navy Island*, near the Canadian shore, gave shelter to the insurgents of the 'Mackenzie War' (1837-38). Just above is *Grand Island* (26 sq. M. in area; comp. p. 147; edell Ho., a popular summer-hotel, $ 2-3), which obtained some notoriety in 1820, when Major Noah proposed to found here the city of Ararat, as a universal refuge for the Jews. Opposite Grand Island, on the American shore, 5 M. above the Falls, is the mouth of the *Cayuga*, where La Salle launched the 'Griffon', the first vessel to navigate the Great Lakes (1679).

The *Observation Trains* of the N.Y.C.R.R. between *Niagara Falls* and (7 M.) *Lewiston* (return-fare 25 c.) afford admirable views (to the left) of the gorge of the Niagara. — *Lewiston*, a pleasant little village, is the starting-point of the steamers across Lake Ontario to Toronto (comp. *Baedeker's Canada*). A fine suspension-bridge, 800 ft. in span and traversed by an electric tramway, connects Lewiston with *Queenston*, on the opposite shore, where Gen. Brock fell on Oct. 13th, 1812 (spot marked by a monument 195 ft. high). Queenston is a station on the Michigan Central R.R. (electric tramway, see p. 146). — About 8 M. to the N.E. of Niagara Falls is the *Reservation of the Tuscarora Indians* (p. 130; baskets, etc., for sale). — *Fort Niagara*, at the (14 M.) mouth of the river, first established in 1678, is now garrisoned by U. S. troops (tramway, see p. 147). Opposite is the watering-place of *Niagara-on-the-Lake*. — Comp. *Baedeker's Canada*.

15. The St. Lawrence River and the Thousand Islands.

Passengers who make the St. Lawrence trip from American soil may join the steamer either at *Charlotte* (see below; fare to Montreal $ 9) or at *Clayton* (p. 154; fare to Montreal $ 5½), which is reached from New York (340 M.) viâ the *N. Y. C. R. R.* to (238 M.) *Utica* and the *Rome, Watertown, & Ogdensburg R. R.* thence (10 hrs.; through-carriages; fare $ 8.27; comp. R. 12a). — The Montreal steamer of the *Richelieu & Ontario Navigation Co.* leaves *Toronto* daily in summer at 3 p.m., *Charlotte* at 11.45 p.m., and *Kingston* (where it receives most of its passengers) about 6 a.m., calling at Clayton 1¼ hr. later. Montreal is reached about 6.30 p.m. In the height of the season it is advisable to secure berths some time in advance. — Those who wish merely to visit the Thousand Islands may do so by one of the steamers which make daily round-trips from Clayton (fare 50 c.); the 'Lawrence', equipped with a powerful search-light, makes her trip in the evening. Comp. *Baedeker's Canada*.

The **St. Lawrence**, the outflow of the Great Lakes, has a length (from Lake Ontario to its mouth) of 500 M. and pours more fresh water into the Ocean than any other river except the Amazon. It is navigable for large vessels to Montreal and for small steamers all the way, though some of the rapids have to be avoided by means of canals by boats ascending the river (comp. pp. 155, 156). During 4-5 months, however, the navigation of the lower St. Lawrence is stopped by ice. Comp. *Baedeker's Canada*.

Leaving *Toronto* (see *Baedeker's Canada*) the steamer makes its first stop at —

95 M. *Charlotte* (European Ho., Latta Ho., $ 2), a small lake-port in the State of New York, connected by a short railway with (9 M.) Rochester (p. 135).

The steamer now heads to the N.W. and crosses the lake to —

185 M. **Kingston** (**British American Hotel*, $ 2-4; *Randolph* $ 2; *Iroquois*, $ 1-2; *Anglo-American Hotel*, $ 1-1½), a city of 17,061 inhab., with picturesque fortifications, situated at the point where the St. Lawrence issues from *Lake Ontario* (see *Baedeker's*

Canada). A small steamer plies regularly to *Cape Vincent* (Carleton Hotel, $ 2½-3).

On leaving Kingston our steamer almos at once begins to traverse the expansion of the St. Lawrence known as the ***Lake of the Thousand Islands**, which is 40 M. long and 4-7 M. wide and contains about 1700 islands, big and little. Many of these islands are favourite summer-resorts, with hotels and boarding-houses, while others are private property, with the country-houses of rich Americans and Canadians. The voyage through them is picturesque, and many of the islands are illuminated at night. Our course at first lies between *Wolfe* or *Long Island* (r.) and *Howe Island* (l.).

210 M. (r.) **Clayton** (*Hubbard*, from $ 2½; *Izaak Walton*, $ 2-2½; *Herald Ho.*, $ 1½-2), a village and summer-resort with (1905) 1918 inhab., is the terminus of the R., W., & O. R. R. from (108 M.) Utica (comp. p. 131). Opposite is the large *Grindstone Island*, behind which, on the Canadian shore, lies *Gananoque* (Gananoque Inn, $ 2½-4).

213 M. (r.) *Round Island* or *Frontenac*, with the *Hôtel Frontenac* ($ 5). — Opposite lies *Murray Isle* (Hot. Murray Hill, $ 3-4).

216 M. (l.) **Thousand Island Park** (*Columbian*, $ 3-4; *Grand View Park*, $ 2-2½; *New Wellesley*, $ 2-2½), a great Methodist resort, at the W. end of *Wellesley Island*. — A little lower down is the *St. Lawrence Park* (r.), with the Lotus Hotel ($ 3-5).

226 M. (r.) **Alexandria Bay** (*Crossmon*, $ 4-5; *Thousand Isle Ho.*, $ 4-5; *Edgewood*, $ 2½-4; *Marsden Ho.*, $ 2½-3½; *Walton Cottage*, $ 2-2½), the chief resort among the Thousand Islands, lies on the American shore, opposite Wellesley Island, and counts pretty scenery and good boating and fishing among its attractions. Among the most prominent villas on the neighbouring islets are those belonging to the *Pullman Family*, to *George C. Boldt* (Heart Island), and to *H. H. Warner* (of the 'Safe Cure'). — *Westminster Park* (Hotel Westminster, $ 2-4) lies at the E. end of Wellesley Island, opposite Alexandria Bay, and is reached by ferry.

Farther on we pass the *Summerland Islets* (l.) and the long *Grenadier Island* (l.), leave the Lake of the Thousand Isles, and reach the open river, here about 2 M. wide. For some distance now the voyage is monotonous and uninteresting.

251 M. (l.) **Brockville** (*Strathcona*, $ 2½-3½; *Revere*, $ 2-2½; *St. Lawrence Hall*, $ 1½-2; *Grand Central*, $ 1½), is a Canadian city with 8940 inhab. and good fishing. This port is not invariably called at.

265 M. (l.) *Prescott* (Daniels Ho., $ 2-3). Passengers are here transferred from the lake-steamer to the river-steamer. — Opposite lies —

268 M. (r.) **Ogdensburg** (*Seymour Ho.*, $ 2-3; *Windsor*, *Norman*, $ 2), a city at the mouth of the *Oswegatchie*, with (1905) 13,179 inhab. and a trade in grain. [The steamer does not call here.] To

the right the buildings of the *Point Airy New York State Asylum for the Insane* are conspicuous. From Ogdensburg to *Rouse's Point*, see p. 312; to *Rome* and *Utica*, see pp. 131, 132.

About 9 M. below Ogdensburg we pass through the *Gallops* or *Galoups Rapids* ($7^1/_2$ M. long), which are followed, $4^1/_2$ M. lower, by the *Rapide Plat*. Neither of these is very noticeable, though each is avoided by a canal (Canadian side) in going upstream. Between them we pass the narrowest point in the river (500 ft.). Many islands.

280 M. (l.) *Morrisburg*, just below the Rapide Plat.

294 M. (r.) *Louisville Landing*, whence stages run to (7 M.) *Massena Springs* (Hatfield Ho., from $3; White, $2; comp. p. 132).

About 35 M. beyond Prescott we enter the ***Long Sault Rapids**, between the Canadian shore and *Long Sault Island*. The rapids are 9 M. long and are tumultuous enough to give a slight suggestion of danger to the process of 'shooting' them. They are avoided in ascending by the *Cornwall Canal*, $11^1/_2$ M. long. Part of the water of these rapids is to be deflected into a great power-canal.

314 M. (l.) **Cornwall** (*Rossmore Ho.*, *Balmoral*, *Duquette*, $ $1^1/_2$-2), a town of 6704 inhab., at the foot of the Long Sault Rapids. — The boundary between the United States and Canada bends away from the river here, and the Indian village of *St. Regis*, almost opposite Cornwall, is in the *Province of Quebec*. The *Adirondack Mts.* (p. 104) are now visible to the right.

The steamer now steers across the river to *Stanley Island* (Algonquin Hotel). — Below this point we traverse the expansion of the river named *Lake St. Francis*, 28 M. long and 5-7 M. wide. Both banks are in Quebec.

At (346 M.) *Coteau Landing* the river is crossed by a railway swing-bridge (comp. *Baedeker's Canada*). [Stanley Island and Coteau Landing may be omitted if the steamer is late.] We now enter a series of rapids which follow each other at short intervals, with a combined length of about 11 M.: *Coteau Rapid*, *Cedar Rapid*, *Split Rock Rapid*, and the **Cascades*. These are avoided, in going upstream, by the *Soulanges Canal*, 14 M. long, with four locks (lockage, $82^1/_2$ ft.). The large Roman Catholic churches of the villages that line the banks are now very conspicuous.

359 M. (r.) *Beauharnois*, at the foot of this series of rapids, lies opposite the mouth of the *Ottawa River*, which enters the St. Lawrence by two channels, enclosing the island of *Perrot*. The village of *Ste. Anne*, on the E. bank of the E. branch, is the scene of Tom Moore's well-known 'Canadian Boat Song'. — The *Lake St. Louis*, which we now traverse, is 12-15 M. long.

375 M. (l.) *Lachine* (Harvey Ho., $ $1^1/_2$-2) lies at the head of the famed ***Lachine Rapids**, the shortest (3 M.) but most violent of all, forming an exciting and dramatic close to our voyage. The rapids begin just below the fine bridge of the *Canadian Pacific Railway*. The *Lachine Canal*, for the use of vessels going upstream, is

8½ M. long and has five locks, affording a rise of 45 ft. Soon after leaving the rapids we pass under the ***Victoria Jubilee Bridge.** To the left lies —

389 M. *Montreal* (see *Baedeker's Canada*).

16. From New York to Philadelphia.

a. Viâ Pennsylvania Railroad.

90 M. Railway in 2¼-2½ hrs. (fare $ 2¼; parlor-car 50 c.). The huge railway-station is in *Jersey City* (p. 10; ferries from 23rd St., Desbrosses St., Cortlandt St., and Brooklyn; river-tunnel, see p. 37).

Jersey City, see p. 73. The train runs to the W. to (9 M.) **Newark** (*Continental*, $ 2½-4), a prosperous city on the *Passaic*, with (1905) 283,289 inhab., handsome churches, pleasant parks, large breweries, and extensive manufactures of jewelry, iron goods, celluloid, and leather (value in 1900, $ 127,000,000). One of the most notable buildings in the city is the office of the *Prudential Insurance Co.*, designed by Geo. B. Post, with interior decorations by Blashfield and Siddons Mowbray. The *Essex County Court House* has good mural decorations by Blashfield, Walker, Cox, Maynard, Pyle, Turner, Millet, and Low. Newark was the birthplace of *Aaron Burr* (1756-1836). — 14 M. *Elizabeth* (Burkely Hotel, $ 2½), a well laid-out city with (1905) 60,509 inhab. (p. 157). — 19½ M. *Rahway*, with (1905) 8649 inhab. and considerable trade and manufactures. — 24 M. *Menlo Park*, the former home of Thomas A. Edison (p. 140), the 'Wizard of Menlo Park'. — 31 M. **New Brunswick** (*Mansion Ho.*, *Palmer Ho.*, $ 2-3), on the *Raritan*, a manufacturing city of (1905) 23,133 inhab., is the site of *Rutgers College* (seen to the right), a well-known institution of the Dutch Reformed Church, chartered in 1766 (260 students). In entering the city we cross a bridge over the river, the *Delaware & Raritan Canal*, and the road. — 41 M. *Monmouth Junction* (p. 177). Beyond (46 M.) *Plainsboro*, to the right, we see the Walker-Gordon Laboratory Farm. — 47 M. *Princeton Junction*, for the branch to (3 M.) *Princeton* (*Princeton Inn, $ 4; The Nassau, $ 2½), with (1905) 6029 inhabitants. Princeton was the home of the late President Cleveland (d. 1908).

Princeton University, formerly *The College of New Jersey*, founded at Elizabeth (see above) in 1746 and transferred to Princeton in 1757, ranks high among the American universities and is attended by about 1300 students. The university buildings, among the chief of which are *Nassau Hall*, *Alexander Hall*, *Marquand Chapel*, the *John C. Green School of Science*, the *Laboratories*, the *Library* (220,000 vols.), *Blair Hall*, *Little Hall*, and the *Gymnasium*, stand in a beautiful tree-shaded 'campus', 225 acres in extent. The last three buildings, situated on the W. margin of the campus, are among the finest examples of the collegiate Gothic style in America. The Continental Congress sat at Nassau Hall from June 16th to Nov. 4th, 1783, and here Washington received the nation's thanks for his successful conduct of the Revolution. In the campus is a reproduction of the famous sundial at Corpus Christi College, Oxford. The boating lake (3½ M. long) was created at the expense of Mr. Andrew Carnegie by damming up the stream that flows past the university. The preceptorial system introduced

EAST BOSTON

— 24 M. Plainfield (*Truell Inn*, *Truell Court*, from $ 3; *Truell Hall*

stream that flows past the university. The preceptorial system introduced

at Princeton by President Woodrow Wilson is an interesting innovation in American college life. — The *Princeton Theological Seminary* (Presbyterian), a separate institution, has about 170 students. — The *Battle of Princeton* (Jan. 3rd, 1777; p. xxx), in which Washington defeated the British, was one of the most important in the early part of the Revolutionary struggle. — At *Rocky Hill*, 4 M. to the N. of Princeton, is the house where Washington wrote his Farewell Address to the Army in 1783, now preserved as a historical museum (adm. 25 c.).

We now descend towards the *Delaware*. — 57 M. **Trenton** (*Windsor*, $ 2½-3, R. from $ 1; *Trenton*, $ 2-3), the capital of New Jersey, on the Delaware, at the head of navigation. Pop. (1905) 84,180. Its chief industrial product is pottery, the material for which is found on the spot (total value of manufactures in 1900, $ 31,645,695). The *State House* is a handsome edifice overlooking the river; the *State Lunatic Asylum* and *Penitentiary* are large buildings. In *Cadwalader Park* is a statue of *John A. Roebling* (p. 40), by W. Couper (1908). The *Delaware & Raritan Canal* intersects the city.

On Dec. 26th, 1776, Washington crossed the Delaware here and surprised and routed the Hessians under Rall, following up this success by the battle of Jan. 2nd, 1777, in which he maintained his ground against Lord Cornwallis. — Trenton is the junction of a branch to *Manunka Chunk* and the *Delaware Water Gap* (see R. 12c).

Bordentown (*Bordentown Ho.*, $ 1½), about 5 M. to the S. of Trenton, was from 1815 till 1832 the home of Joseph Bonaparte, ex-king of Spain, whose fine park is still shown.

Crossing the Delaware, we now enter the 'Keystone State' of *Pennsylvania* and traverse a rich farming country. To the right is the canal. At (58 M.) *Morrisville* the French general Moreau lived from 1806 to 1813, in a house built by Robert Morris, the 'banker of the Revolution'. 67 M. *Bristol*. As we approach Philadelphia we leave the Delaware and traverse a district full of mills, manufactories, and artizans' dwellings. 81 M. *Frankford* is the junction of the 'bridge' trains to Atlantic City (see p. 180). 85 M. *North Philadelphia* (formerly *Germantown Junction*).

As we enter Philadelphia we cross and recross the *Schuylkill* ('Skoolkill'). *Views of the city and Fairmount Park (p. 173).

90 M. **Philadelphia** (Broad Street Station), see p. 158.

b. Viâ Reading System.

(Bound Brook Route.)

90 M. Central R. R. of New Jersey and Philadelphia & Reading R. R. in 2 hrs. (fares as at p. 156). The route is much the same as the Penna. R. R. — Station in *Jersey City* (see p. 10; ferries from W. 23rd St. and Liberty St.).

Jersey City, see p. 73. The train crosses *Newark Bay* by a bridge 2M. long, with views of *Newark* (p. 156) to the right and *Staten Island* (p. 72) to the left. 10 M. *Elizabethport*, the junction of branches to Newark and to the New Jersey seaside-resorts (R. 18), is the seat of the Singer Sewing Machine Co. 11½ M. *Elizabeth* (p. 156). — 24 M. **Plainfield** (*Truell Inn*, *Truell Court*, from $ 3; *Truell Hall*

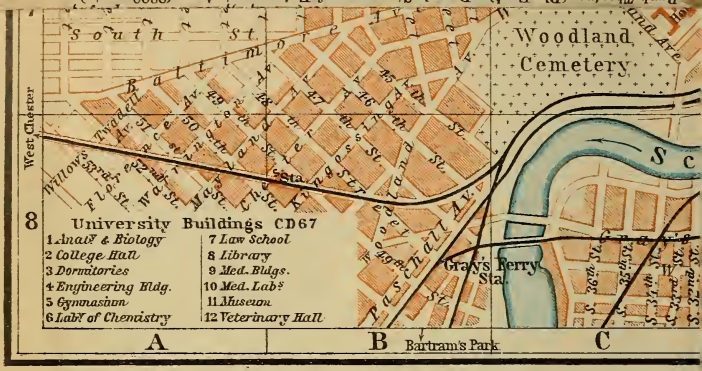
from $2^1/_2$; *Kensington*, $2), a pleasant residential town with (1905) 18,468 inhabitants. On the *Orange Hills*, to the right, is *Washington's Rock*, whence that general is said to have observed the movements of the British troops. — At (30 M.) *Bound Brook*, on the *Raritan*, we pass on to the tracks of the *Philadelphia & Reading R.R.* In 1777 the Americans were defeated here by Lord Cornwallis. The line now traverses corn-fields and orchards. 41 M. *Belle Mead*, with famous stock-farms. — From (57 M.) *Trenton Junction* a short line runs to (4 M.) *Trenton* (p. 157). Our line crosses the *Delaware* by a fine bridge (views) at (60 M.) *Yardley*. 67 M. *Langhorne*, a summer-resort of the Philadelphians; 79 M. *Jenkintown* (Beechwood Inn, from $2^1/_2$), the junction for Bethlehem (p. 182). At (85 M.) *Wayne Junction* (pp. 175, 182) the New York & Washington expresses of the B. & O. R. R. diverge to the right, crossing the *Schuylkill* (p. 157) twice, traversing Fairmount Park (p. 173), and running into the Baltimore & Ohio Station (see below).

90 M. **Philadelphia** (Reading Terminal Station; see below).

17. Philadelphia.

Railway Stations. *Broad Street Station* (Pl. F, 6; restaurant), facing the City Hall, for the trains of the Penna. R. R. to New York, Boston, Baltimore, Washington, Pittsburg, Chicago, Gettysburg, Atlantic City, Harrisburg, St. Louis, and numerous local lines; *Reading Terminal Station* (Pl. F, 6; *Restaurant), of the Philadelphia and Reading R. R., for New York (R. 16b), Gettysburg, Lehigh Valley, etc.; *Baltimore & Ohio Station* (Pl. E, 6; restaurant), cor. of Chestnut St. and 24th St., for Washington, the West, etc.; *West Philadelphia Station* (Pl. D, 6), a secondary station of the Penna. R. R. for all lines (some of the trains between New York and the South touch here only and do not run into the Broad St. Station); *West Jersey R. R. Station* (Pl. I, 6, 7), Camden, reached by ferry from Market St. (see Pl. H, I, 6), for Cape May, Atlantic City, and the Amboy Division of the Penna. R. R.; *Atlantic City R. R. Station* (Pl. I, 8), Camden (ferry from Chestnut St. or South St.), for Atlantic City, Cape May, etc. — *Tramways* run from all these stations or ferries to the chief centres of the city. *Cabs*, see p. 159.

Hotels. *Bellevue-Stratford (Pl. a; F, 6), Broad and Walnut Sts., a huge edifice resembling the Waldorf-Astoria at New York and under the same management, R. from $2^1/_2$ (tennis courts, skating-rink, and solarium on the roof); Stenton (Pl. l; F, 7), Broad St., cor. Spruce St., R. from $1^1/_2$; St. James, Walnut and 13th Sts. (Pl. F, 6), $4-6, R. from $2; Majestic (Pl. p; F, 4), at the cor. of Broad St. and Girard Ave., R. from $2; Walton (Pl. k; F, 6, 7), a large house at the cor. of Broad and Locust Sts., R. from $1^1/_2$, well spoken of; Rittenhouse (Pl. b; E, 6), Chestnut St., near 22nd St., $3^1/_2$-4, R. $1^1/_2$-2; Colonnade (Pl. d; F, 6), Chestnut and 15th Sts., from $3^1/_2$, R. from $1^1/_2$; Aldine (Pl. e; E, 6), 1910 Chestnut St., a good family hotel, $3^1/_2$-6, R. $1-5; Lorraine (Pl. n; F, 4), cor. N. Broad St. and Fairmount Ave., at some distance from the centre of the city, from $3, R. from $1^1/_2$; Normandie, Chestnut and 36th Sts. (Pl. C, 6), from $3^1/_2$; Continental (Pl. f; G, 6), 9th and Chestnut Sts., $2^1/_2$-4, R. from $1; Green's (Pl. h; G, 6), 8th and Chestnut Sts., R. $1-2^1/_2$; Bingham (Pl. o; F, G, 6), 11th & Market Sts., $2^1/_2$, R. from $1; Windsor (Pl. c; F, 6), 1225 Filbert St., from $2, R. from $1; Dooner's, 27 S. 10th St., R. $1-2 (men only), very fair; Hanover (Pl. g; F, 6), 12th and Arch Sts., from $2^1/_2$, R. from $1; Vendig (Pl. m; F, 6), 12th and Market Sts., R. $1-2^1/_2$ (men only).


Park Theatre (Pl. F, 4), Broad St., cor. of Fairmount Ave. (2200 seats);
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and Market Sts., R. $ 1-2½ (men only).

Restaurants. *Bellevue-Stratford Hotel* (p. 158), somewhat expensive; *Kugler*, 1412 Chestnut St. (no half-portions); *Café Edouard*, Walnut St., cor. 13th St.; *Majestic Hotel* (p. 158), D. $ 1¼, in the so-called 'Grotto' $ 1; *Café l'Aiglon*, N.W. cor. of 15th and Chestnut Sts.; *Hotel Walton Café*, see p. 158; *Colonnade Hotel*, see p. 158; *Blank*, 1024 Chestnut St., D. $ 1; *Acker's Quality Shop*, Chestnut St., cor. 12th St., D. $ ¾-1; *Dooner*, see p. 158; *Green*, see p. 158, D. 50 c.; *Soula's Ratskeller*, in the basement of the Betz Building (p. 162), City Hall Square, D. (from 12 to 3) 50 c.; *Soulas*, 5th St., above Chestnut St., for men; *Bingham Hotel*, see p. 158; *Boothby*, 1233 Chestnut St., near 13th St. (oysters); *Partridge*, 15 N. 8th St.; *Augustin & Baptiste*, 255 S. 15th St.; *Wanamaker's*, see p. 162; *Childs' Dairy Restaurants* (comp. p. 14), Chestnut St., Nos. 706, 1208, 1435, cor. of 10th St., etc.; *Denneti's Lunch Rooms*, 529 Chestnut St., 13 S. 9th St., and 122 & 1309 Market St. (low prices); *Bourse Restaurant*, see p. 164; *Ladies' Depository*, 114 S. 17th St.; *Railway Restaurants*, see p. 153; *Automatic Café*, 818 Chestnut St., 909 Market St., & 109 S. Juniper St.

Tramways *(Street Cars).* *Electric Cars* traverse all the principal streets (fare 5 c., exchange-tickets 8 c.). Cars run to the E. on Columbia Ave., Jefferson, Girard Ave., Wallace, Green, Spring Garden, Callowhill, Race, Arch, Filbert, Market, Chestnut, Spruce, and Lombard Streets; to the W. on Columbia Ave., Master, Girard Ave., Poplar, Fairmount Ave., Spring Garden, Vine, Arch, Market, Walnut, Pine, and South Streets; to the N. on 3rd, 5th, 8th, 9th, 11th, 13th, 16th, 18th, 19th, and 23rd Streets; to the S. on 2nd, 4th, 6th, 7th, 10th, 12th, 15th, 17th, 19th, 20th, and 23rd Streets. — **Motor Omnibuses** (5 c.) run (ca. every 10 min.) up S. and N. Broad St. to Diamond St. (Pl. F, 2), then along it to Fairmount Park (entrance at the cor. of Dauphin and N. 33rd Sts.). — The **Seeing Philadelphia Automobiles** (comp. p. 19) start at Keith's Vaudeville Theatre (see below) at 10 a.m., 2 p.m., and 4 p.m. (fare $ 1). The trip takes 2 hrs.

Subway and Elevated Railroad. The *Subway* of the *Philadelphia Rapid Transit Co.* runs from Market St. Ferry (Pl. H, 6) beneath Market St. to the Schuylkill River at 24th St. (Pl. E, 6). From this point it is continued by an *Elevated Railroad*, following the line of Market St. to 70th St. (beyond Pl. A, 6), where connection is made by tramway with Ardmore, Bryn Mawr, West Chester, and other near-by places. Trains run every 5-10 min. (fare 5 c.).

Cabs. — (1). *Railway Service.* Hansoms (1-2 pers.) 1½ M., 25 c., each 1 M. addit. 15 c.; per hr. 65 c., each addit. ¼ hr. 20 c.; no trunks carried. Four-wheelers: 1-2 pers., 40c., 20c., 75c., 20c.; each addit. pers. 10 c.; each trunk 25c., small article carried outside 10c. — (2). *City Service.* Carriages (two horses): 1 pers., 1 M. 75c., 2 pers. $ 1.25, each addit. pers. 25c.; 2 M., $ 1.25, $ 1.75, 25c.; each 1 M. addit., each pers. 50c.; per hr., 1-2 pers., $ 1.50, each pers. addit. 25c. One trunk or valise free, each extra article of luggage 6c. — (3). *Taxicabs* for 1-4 pers., ½ M. 30 c., each ¼ M. addit. 10 c.; waiting 10 c. for each 6 min.; each package carried outside 20 c.

Ferries cross the Delaware to *Camden* (p. 175) from Market, Vine, South, Chestnut, and Shackamaxon Sts. (3 c.), and to *Gloucester* (p. 175) from South St. (10 c.).

Steamers. Steamers ascend the Delaware to *Burlington* and other points. Steamers also ply to *Liverpool*, *London*, *Antwerp*, *Hamburg*, *New York*, *Boston*, *Baltimore*, *Savannah*, *Charleston*, *Florida*, *Jamaica*, etc.

Theatres. *Academy of Music* (Pl. F, 7), Broad St., cor. of Locust St. (2900 seats), used for operas (grand opera once a week in the season), concerts, balls, etc.; *Hammerstein Opera House* (Pl. F, 4; 4000 seats), cor. of N. Broad and Poplar Sts.; *Chestnut Street Opera House* (Pl. G, 6), 1023 Chestnut St.; *Chestnut Street Theatre* (Pl. F, 6), 1211 Chestnut St.; *Lyric Theatre*, *Adelphi Theatre*, side by side in N. Broad St., cor. of Cherry St. (Pl. F. 5, 6); *Broad St. Theatre* (Pl. F, 7), near Locust St.; *Walnut St. Theatre* (oldest in America; 1803), cor. Walnut and 9th Sts. (Pl. G, 6); *Garrick* (Pl. F, 6), Chestnut St., cor. Juniper St.; *Keith's Vaudeville Theatre* (Pl. F, 6), 1116 Chestnut St.; *Forrest Theatre* (Pl. F, 6), S. Broad St., cor. Sansom St.; *German Theatre*, cor. of Franklin St. and Girard Ave. (Pl. G, 4), for German plays; *Park Theatre* (Pl. F, 4), Broad St., cor. of Fairmount Ave. (2200 seats);

Grand Opera House (Pl. F, 3), N. Broad St., cor. of Montgomery Ave.; *Eleventh Street Opera House* (Pl. F, 6), 11th St., above Chestnut St. (minstrel entertainments); *Kensington Theatre*, cor. E. Norris St. and Frankford Ave. (Pl. H, 2). — *Zoological Garden*, see p. 175.

Clubs. *Philadelphia*, N.W. cor. 13th and Walnut Sts.; *Rittenhouse*, 1811 Walnut St.; *University*, 1510 Walnut St.; *Union League* (Pl. F, 6), Broad St., cor. of Sansom St.; *City*, 1418 Walnut St.; *Markham*, 1424 Walnut St.; *Lawyers*, 1507 Walnut St.; *Mercantile Club* (Pl. F, 3; p. 169), 1422 N. Broad St., cor. of Master St.; *Racket Club* (Pl. F, 6), 16th St., below Walnut St.; *Art Club*, see p. 170. — The well-known dinners of the *Clover Club* are held in the Bellevue-Stratford Hotel. — Philadelphia is the American headquarters of *Cricket*. The chief clubs are the *Belmont*, near 49th St. Station; *Merion*, at Ardmore; *Philadelphia*, near St. Martin's; *Germantown*, at Manheim, near Queen Lane Station.

Tourist Agents. *Raymond & Whitcomb Co.*, 1005 Chestnut St.; *Thos. Cook & Son*, 828 Chestnut St.

Post Office (Pl. G, 6; p. 163), cor. of Chestnut and 9th Sts.

Exhibitions of Art. *Academy of Fine Arts*, see p. 166; *Memorial Hall*, Fairmount Park, see p. 174; *Art Club*, see p. 170. The private collections of *Mr. Widener* (good examples of Van Dyck, etc.), *Mr. Elkins*, and *Mr. Johnson*, ranking among the finest in the country, can at present be seen by private introduction only, but there is a scheme afoot to unite them in a large new building open to the public.

Consuls. British, *Mr. W. Powell*, 222 S. 4th St.; German, *Mr. W. Hagen*.

Philadelphia (the 'Quaker City'), the third city of the United States in extent and population (1,293,700 inhab. in 1900), lies mainly upon a broad plain between the *Delaware* and the *Schuylkill*, 96 M. from the Atlantic Ocean. It is 22 M. long from N. to S. and 5-10 M. wide, covering 130 sq. M., or a little more than the parliamentary district of London, though, of course, not so completely built over. It probably contains a larger proportion of small houses than any other large city in the world (4.5 inhab. per house; New York ca. 16) and is sometimes called the 'City of Homes'. It is laid out with chessboard regularity (see p. 161). The characteristic Philadelphia house is a two-storied or three-storied structure of red pressed brick, with white marble steps. The two rivers give it about 30 M. of water-front for docks and wharfage, and it is the headquarters of two of the greatest American railways (the Pennsylvania and the Reading). Its commerce by sea and land is very large, and as a manufacturing centre it ranks next to New York and Chicago. The great wholesale business-thoroughfare is Market Street, running E. and W. between the two rivers, while Chestnut Street, parallel with it on the S., contains the finest shops, many of the newspaper-offices, etc. Broad Street is the chief street running N. and S. Among the most fashionable residence-quarters are *Rittenhouse Square* and the W. parts of *Walnut*, *Locust*, *Spruce*, and *Pine Streets*. *Eighth Street* is the great district for cheap shops.

History. Philadelphia, the 'City of Brotherly Love' or 'Quaker City', was founded in 1682 by a Quaker colony under William Penn (1644-1718), who purchased the site from its Indian owners. [A Swedish colony, however, settled on the Delaware, a little lower down, in 1638 (comp. p. 171), and many of Penn's original patentees were descendants of these settlers.] The city attracted large numbers of immigrants and received its charter from Penn in 1701, when it had about 4500 inhabitants. From about that

time to the 19th century it rivalled Boston as the leading city of the country, and it was the scene of the most important official steps in the Revolution. The first Continental Congress assembled here in 1774; the *Declaration of Independence* was signed here on July 4th, 1776; the *Constitution of the United States* was drawn up and promulgated here in 1787; the first President of the United States resided here; and here Congress assembled till 1797. From Sept., 1777, to June, 1778, the city was in the possession of the British. During the 19th century its history was one of quiet and rapid growth. In 1876 Philadelphia was the scene of the *Centennial Exhibition*, held in honour of the 100th anniversary of the Declaration of Independence. — After William Penn, the man whose name is most intimately associated with Philadelphia is *Benjamin Franklin* (pp. 163, 165, 171), who came here in 1723 at the age of eighteen. The *Friends* or *Quakers* still form a very important element in Philadelphia, many of the oldest, wealthiest, and most esteemed families belonging to this sect. — The so-called *Mummers' Parade* or *Parade of the New Year Shooters*, celebrated in the streets on Jan. 1st, is an interesting and in many ways a unique spectacle.

Industry and Commerce. The value of the manufactures of Philadelphia in 1900 was $ 603,500,000 (120,700,000*l.*), the number of hands employed being 247,000. The chief products are machinery, locomotives, iron wares, ships, carpets, woollen and cotton goods, leather, sugar, drugs, and chemicals. The value of its exports in 1907 was $ 106,570,527, that of its imports $ 80,693,327. In 1907 the port was entered and cleared by 2538 sea-going vessels, with an aggregate tonnage of 4,775,372, and by 8895 coasting vessels of 7,214,995 tons.

Streets. In planning his city Penn laid out two wide thoroughfares crossing it at right angles (High, now Market St., and Broad St.), with an open space at their intersection and four other squares (Washington, Franklin, Logan, and Rittenhouse Squares) near the outer corners of his plan. The other streets were all laid out parallel to the two above-named, and this rule has also been observed in the subsequent extensions of the city. Those parallel to Market St. have names (often taken from trees), while those parallel with Broad St. are numbered (Front, Second, etc.). The prefixes North and South distinguish respectively the numbered streets to the N. and S. of Market St. The houses on the N. or E. side of the street have odd numbers, and those on the S. or W. side even numbers. The numbers of the E. and W. streets begin at the Delaware, those of the N. and S. streets at Market St. With each new block a new century of numbers begins, although there are seldom more than 40 numbers in a block. With this system a very slight familiarity with the city enables one to find his way to any house. Thus, *e.g.*, 1521 Arch St. must be between N. 15th St. and N. 16th St.

In *City Hall Square* (Pl. F, 6), at the intersection of Broad St. and Market St., in the centre of the city, stands **City Hall** (Pl. F, 6), generally known as the *Public Buildings*, a tasteless pile with a granite basement-story and white marble superstructure, begun in 1874. It is 486 ft. long from N. to S. and 470 ft. in breadth, covering a greater area ($4^1/_2$ acres) than any other building in the United States (Capitol at Washington, $3^1/_2$ acres; St. Peter's at Rome, $4^5/_6$ acres; Palais de Justice at Brussels, $6^1/_4$ acres). The *Tower*, 510 ft. high, is surmounted by a statue of William Penn, 37 ft. in height. The style of the building is modified French Renaissance; the architect was *John McArthur Jr.* Its cost, including the furnishing, was about $ 25,000,000. Visitors may ascend to the roof (elevators), which commands an extensive view; a special permit (obtained in Room 113) is necessary for the tower.

The building contains 750 rooms. The N. side is devoted to the *Mayor's Office*, the *Council Chamber*, and other offices of the municipal government. The S. and W. sides contain the *Supreme Court of Pennsylvania* and other courts. In a room on the first floor is a *Statue of Washington* by Bailly, formerly in front of Independence Hall (p. 163).

The broad pavement round the City Hall is adorned with statues of *Gen. Reynolds* (1820-63), *Gen. McClellan* (1826-85), *Stephen Girard* (p. 169), *John C. Bullitt* (1824-1902), *President McKinley* (1843-1901), and *Joseph Leidy* (1823-91), the naturalist, and with the 'Pilgrim' by Saint-Gaudens, a somewhat altered reproduction of his 'Puritan' (p. 240).

On the W. side of City Hall Sq., opposite the City Hall, is the enormous ***Broad Street Station** (Pl. F, 6) of the Penna. Railroad. The train-shed has a span of 304 ft. The waiting-room contains a large allegorical relief, while one wall is covered with a mammoth railway map of the United States. Adjacent is the *Arcade Building*, connected with the station by an overhead bridge over Market St. — On the N. side of the square, at the corner of Broad St. and Filbert St., is the ***Masonic Temple** (Pl. F, 6), a huge granite structure with a tower, 250 ft. high, and an elaborately carved Norman porch. The lodge-rooms are finished in accordance with seven different styles of architecture (Egyptian, Ionic, Corinthian, Norman, Gothic, Renaissance, and Oriental). — On the E. side of the square, occupying the block bounded by the square, Market St., 13th St., and Chestnut St., is *Wanamaker's Store* (Pl. F, 6), the Bon Marché or Whiteley's of Philadelphia, with 4500 employees (restaurant). — On the S. side of the square is the *Betz Building* (Pl. F, 6), with heads of the Presidents of the United States in the bronze cornice above the third-story windows.

***Chestnut Street** (Pl. A-H, 6) is the chief street of Philadelphia, containing many of the handsomest and most interesting buildings; and we now follow it towards the Delaware (E. or left). The S. side pavement is the fashionable promenade of the Quaker City. To the left, at the corner of Broad St. and adjoining the Betz Building (see above) on the S., is the *Franklin National Bank* (Pl. F, 6; adjoined by the *Mint Arcade*), while to the right rises the fine office of the *Real Estate Trust Co.* At the corner of 12th St. (left) is the tall *Commonwealth Trust Building*, and at the corner of 10th St., on the same side, is the *New York Mutual Life Insurance Co.* At 1217 Chestnut St. are the temporary headquarters of the **Free Library of Philadelphia** (280,000 vols.), which has nineteen branches in different parts of the city. Mr. Carnegie has given a sum of $1,500,000 for the erection of thirty branch buildings.

In 12th St., to the N., is the *William Penn Charter School*, founded in 1689. In 10th St., also to the N., is the *Mercantile Library* (Pl. G, 6), with 210,000 vols. and a free reading-room (9-10).

Between 10th and 9th Sts., to the left, are the *Mortgage Trust Co.*, the *Penn Mutual Life Building* (with an elaborate façade), and the *Office of the 'Record'*. At the corner of 9th St., extending on the N.

to Market St., is the **Post Office** (Pl. G, 6), a large granite building in the Renaissance style, erected at a cost of $5,000,000. It also contains the *United States Courts* and the offices of various Federal officials. In front of the Post Office is a colossal seated figure of *Benjamin Franklin* (1706-90), by John J. Boyle. Between 8th and 7th Sts. (left) is the ornamented front of the *Union Trust Co.* This neighbourhood contains several newspaper-offices. At the corner of 6th St., on the *Public Ledger Building*, is another statue of *Franklin.*

In 7th St., a little to the N. of Chestnut St., is the *Franklin Institute* (Pl. G, 6), with a library, museum, and lecture-hall.

We now reach, on the right, between 5th and 6th Sts., *Independence Hall (Pl. G, 6), or the old *State House* (open on week-days, 9-4), a modest brick edifice (1732-35), which is in some respects the most interesting building in the United States. The steeple was added afterwards. Here the Continental Congress met during the American Revolution (1775-81), and here, on July 4th, 1776, the Declaration of Independence was adopted. In 1897-98 the whole building was restored as far as possible to its original condition.

Passing through the door in the centre, we first enter (right) the *State Supreme Court* or *West Room*, containing the portraits of various Chief Justices.

To the left is the *East Room* or *Independence Hall* proper, the actual scene of the deliberations of those statesmen of whom William Pitt wrote: 'I must declare that in all my reading and observation, for solidity of reasoning, force of sagacity, and wisdom of conclusion, under such a complication of difficult circumstances, no body of men could stand before the National Congress of Philadelphia.' With the exception of a new flooring, the room is substantially in the same state as when the Congress sat, and the old furniture has been replaced in it, including the table on which the Declaration of Independence was signed. On the back of the chair of the President of the Congress (John Hancock) is the emblem of which Franklin said that he had often wondered, before the success of the Revolution was assured, whether it was the *rising* or the *setting* sun. On the E. wall hangs a facsimile of the Declaration of Independence (original at Washington, see p. 223). Also on the walls are portraits of Washington (by *Peale*) and of nearly all the signers of the Declaration.

On the upper floor we first enter a *Room* containing portraits, the original Charter of Philadelphia (1701), a piece of the Penn Treaty Elm (comp. p. 171), and a picture of his wampum belt. — The *Banqueting Hall* contains the sofa and church-pew of George Washington, two chairs of Wm. Penn, a painting of Penn's Treaty with the Indians, by *B. West*, and portraits of Martha Washington, Key (author of 'The Star-Spangled Banner', pp. 165, 350), British sovereigns, Washington's generals, naval officers, and other worthies of the Revolutionary period. Part of the original floor-boards are shown under glass. — The *Council Chamber* or *Governors' Room* contains portraits of Revolutionary officers, American and foreign. — The *South-East Room* has portraits of the members of the Constitutional Convention of 1787.

In the small back-hall at the foot of the staircase, opposite the main entrance, under glass, stands the famous **Liberty Bell*, the first bell rung in the United States after the Declaration of Independence. It was afterwards used on various occasions of national importance, but was cracked in 1835, in tolling for the funeral of Chief Justice Marshall, and since 1843 has never been sounded. It was originally cast in England, but was recast in Philadelphia. In the same room are portraits of Marshall, Penn, and Washington. — On the walls of the *Stairway* are portraits of Lafayette, Governor Hamilton, the Chevalier Gerard, Louis XVI., and George III.

The central part of the State House is connected by open arcades restored to their original appearance) with two smaller wing-buildings,

containing a *National Museum* of relics, such as books, posters, wood-cuts, engravings, newspapers, costumes, models, views and plans of Philadelphia, the 'Serpent Flag', and Ben. Franklin's lightning rod. Those in the W. building illustrate the Colonial, those in the E. the Revolutionary Period. Adjoining that to the W., at the corner of 6th St., is the old *Congress Hall*, in which Washington was inaugurated in 1793 and Adams in 1797. To the E., at the corner of 5th St., is the *Old City Hall*, dating from 1791 and occupied by the U. S. Supreme Court in 1791-1800. — Behind the State House lies *Independence Square*, an open space four acres in extent, with a statue of Commodore John Barry (1745-1803), 'Father of the American Navy', by Murray (1907).

Opposite Independence Hall is the picturesque gabled building of the *Pennsylvania Company for Insurances on Lives.*

In S. 5th St., just below Chestnut St., is the **American Philosophical Society**, an outgrowth of the *Junto Club*, founded by Franklin in 1743. It is the oldest learned society in the United States, and contains a library of 70,000 vols. and many interesting relics.

Beyond 5th St., Chestnut St. is flanked on both sides with handsome banks and insurance-offices. At the corner of 5th St., to the right, is the white marble *Drexel Building* (Pl. G, 6). The roof, to which visitors are admitted, commands an excellent view. Adjacent is the *Custom House* (Pl. G, 6), with a Doric portico, originally erected in 1819-24 for the United States Bank.

In 5th St., to the N. of Chestnut St., stands the **Bourse** (Pl. G, 6), erected in 1895, and containing the offices of the Board of Trade, the Commercial Exchange, and other business organizations. The two lower stories are a good example of the style of Francis I. Visitors are admitted to the galleries flanking the huge glass-covered hall. There is a restaurant upstairs.

A lane diverging to the right between 4th and 3rd Sts., opposite the *Fidelity Trust Co.*, leads to ***Carpenters' Hall** (Pl. G, H, 6; open on week-days, 9-3), where the First Colonial Congress assembled in 1774. It contains the chairs used at the Congress, various historical relics, and the inscription: 'Within these walls Henry, Hancock, and Adams inspired the delegates of the colonies with nerve and sinew for the toils of war.' — Chestnut St. ends at the Delaware River.

No. 133 S. 2nd Street occupies the site of the 'Slate-roof House', the home of William Penn.

Walnut Street (Pl. A-H, 6) runs parallel to Chestnut St., one block to the S. In this street, at the intersection of Dock St. and 3rd St., is the *Stock Exchange* (Pl. H, 6), formerly the *Merchants' Exchange*, with a semicircular portico facing the river (visitors admitted to the gallery, 10-3). Near it (in 3rd St.) is the *Girard Bank*, built for the first U.S. Bank and long owned by Stephen Girard (p. 169). At 4th St. is the building of the *Manhattan Insurance Co.*

Three blocks to the S., at the corner of Pine St. and 3rd St., is *St. Peter's Church* (Pl. H, 7), dating from 1758-61 and little changed in appearance. The brave Commodore Decatur (1779-1820) is buried in the old churchyard. In an alley of 4th St., near Locust St., is *St. Joseph's Church* (Pl. G, 6), rebuilt in 1830. A little farther to the S., on the W. side of 4th St., is *St. Mary's Church* (Pl. G, 7), the original Roman Catholic cathedral of Philadelphia (1763). The churchyard contains the graves of various historical personages. — In Catherine St., near 4th St. (Pl. G, 7), is the *Church of the Evangelists*, built in the Basilica style, with an interior elaborately decorated in the early-Italian style. Over the door (inside) is a painting of Charles I. of England. The neighbourhood is largely occupied by Italians.

Between 6th and 7th Sts. Walnut St. passes *Washington Square* (Pl. G, 6, 7; p. 161), with a great variety of trees. At the N.W. corner of Washington Square is the *Philadelphia Saving Fund Society*. At the S.W. corner of Walnut and 10th Sts. is the *Western Saving Fund Society* and at the N.W. corner is the *Jefferson Medical College* (Pl. G, 6), with an anatomical museum and a hospital. At the S.E. corner of 11th St. is the office of the excellent *Philadelphia Society for Organizing Charity*. At the N.W. corner of Walnut St. and Juniper St., to the right, is the *Witherspoon Building*, with the offices and historical museum of the Presbyterian Church (North).

Two blocks to the S. of Walnut St., bounded by Spruce, Pine, 8th, and 9th Sts., stands the *Pennsylvania Hospital* (Pl. G, 7), the oldest in the country. It contains West's picture of 'Christ healing the sick', and in the garden, towards Pine St., is a statue of William Penn. — No. 413 S. 10th St., the house in which *Henry George* (d. 1897) was born, has been fitted up as a memorial 'single tax' library and reading-room. — At the corner of Locust St. and 13th St., one block to the S. of Walnut St., stands the new fire-proof building (1907-8) of the *Historical Society of Pennsylvania (Pl. F, 7; open 10-6), founded in 1824, which contains highly interesting historical relics, paintings, and autographs. Among the chief treasures are a letter of *President Lincoln* (1864) and the play-bill of the theatre on the night he was assassinated; the *Bradford Almanack* of 1686, the first book printed in the Middle States; many other examples of *Bradford*, *Franklin*, and other printers of the Middle States before 1800; relics of *Washington*, *Jefferson*, and *Franklin;* handbill printed at Charleston (1860), announcing the dissolution of the Union; *William Penn's* Bible and razor; the original *Instructions of Penn* regarding Pennsylvania; first copy of *Poor Richard's Almanack;* one of the *Stamp Act* stamps; *German Bible* and other works printed by Christopher Saur, including the *First Bible printed in America;* the *Tower Collection of Colonial Laws down to 1789;* portraits of *Penn*, *Washington* (by Stuart, Wertmüller, Peale, Polk, and Wright), *Franklin*, *Morris*, etc.; several portraits by *Copley;* relics of *Robert Morris;* the *News of the Battle of Lexington*, passed on to Philadelphia in the manner of the 'Fiery Cross' (April 19-24th, 1775), with attestations of the persons through whose hands it passed; letter of *Washington;* original MSS. of 'Home, Sweet Home' (p. 77) and 'The Star-Spangled Banner' (p. 204); telescope of *Paul Jones;* letters and will of *John Brown* (p. 351); chairs that belonged to *Penn;* and part of *Franklin's Printing Press*.

At the N.E. corner of Locust and 13th Sts. (Pl. F, 6) is the College of Physicians, incorporated in 1787, with a fine medical library. The large hall, in which the *Anatomical Museum* is displayed, contains a good chimney-piece. [The corner-stone of the new College of Physicians was laid in 1908 at the corner of 22nd & Ludlow Sts.]

At the corner of Locust St. and Juniper St. is the *Academy of the Protestant Episcopal Church*, a well-equipped and well-managed day-school for boys, founded in 1785. — The Philadelphia Library (Pl. F, 6), also at the corner of Locust St. and Juniper St., was founded by Dr. Franklin and others in 1731 and contains 225,000 vols., a clock said to have belonged to Cromwell, part of Franklin's electrical machine, and other relics.

Walnut St. now crosses Broad St., to the W. of which it consists mainly of private residences. No. 1524 is the home of *Dr. S. Weir Mitchell*, the novelist. Between 18th and 19th Sts. we pass *Rittenhouse Square* (Pl. E, 6, 7; p. 161), a fashionable residence-quarter.

**St. Mark's Church*, Locust St., between 16th and 17th Sts., is a singularly pure example of the early Decorated Gothic style. The 'Lady Chapel', with its silver altar, is a memorial of Mrs. Rodman Wanamaker.

Near the bridge at the Schuylkill River (Pl. D, 6) are a flight of steps descending to 24th St. and a covered walk leading to the **Baltimore and Ohio Railroad Station** (Pl. E, 6), in Chestnut St. Following the latter street towards the E., we pass the *First Unitarian Church* and the *Swedenborgian Church* (cor. 22nd St.) on the left, and the *Lutheran Church of the Holy Communion*, on the right. At the corner of Broad St. are the white marble building of the **Girard Trust Co.* (Pl. F, 6), with a rotunda (1907; left) and the tall *Land Title Building* (Pl. F, 6; 14 stories; right).

We now again reach our starting-point at Broad St. (comp. p. 161).

North Broad Street (Pl. F, 6-1), beginning on the N. side of City Hall Square, a handsome street, 113 ft. wide, contains in its upper portion many of the finest private residences in Philadelphia. To the right, at the corner of Filbert St., is the *Masonic Temple* (see p. 162), which is adjoined by the *Arch Street Methodist Episcopal Church*. On the opposite side of the street are the tall buildings of the *United Gas Improvement Co.* and the *Fidelity Mutual Life Association*. To the right is the *Odd Fellows' Temple*.

To the left, at the corner of Cherry St., is the **Pennsylvania Academy of the Fine Arts** (Pl. F, 6), a building in the Venetian style of architecture (admission free; catalogue 25 c.; Manager, *Mr. John E. D. Trask*). The Academy was founded in 1805; its first Director was C. W. Peale (1805-10). Besides its collections it supports an important art-school (sending 15 students annually to study in Europe), the lecture-hall of which (groundfloor) is adorned with effective decorations by the pupils. Its collections include 500 paintings, numerous sculptures, several hundred casts, and 50,000 engravings. The early American school is especially well represented. Annual exhibitions of the works of living artists are held here in winter. The letters prefixed to the number of the pictures in the catalogue show the section to which the work belongs (A = American, B = British, etc.).

The Stairway and the Corridors adjoining the head of it contain a number of large historical and other canvasses, including examples of *Allston*, *Bouguereau*, *Wittkamp*, *West* ('Death on the Pale Horse'), *Vernet*, *Bisbing*, and *Janssen*. — Room A (S.E. corner-room) contains small paintings belonging to the Temple Collection (see p. 167).

Gallery B (National Portrait Gallery). To the left, 107. *C. W. Peale* Portrait of himself; twenty-two portraits by *Gilbert Stuart*, the largest collection of this master's works (*140. Mrs. Blodgett; *157. 'Lansdowne' Portrait of Washington; 149. President Madison; 151. President Monroe; 158. Washington); 105. *Peale*, Francis Scott Key (p. 204); no number, *Duplessis*, Ben. Franklin; *John Neagle*, Pat Lyon at the forge; 166. *Thomas Sully*, Mrs. Kemble, 167. Eliza Leslie, 164. Charles Kemble, 161. G. F. Cooke as Richard III.; 65. *Inman*, Lord Macaulay; 40. *W. H. Furness*, R. W. Emerson; 50. *J. McLure Hamilton*, Richard Vaux; 510. *Carolus-Duran*, Mme. Modjeska; 49. *J. McLure Hamilton*, W. E. Gladstone in Downing St.; 131. *John S. Sargent*, Mr. & Mrs. John W. Field; *Joseph De Camp*, Dr. H. H. Furness; *C. W. Peale*, Robert Morris.

The miscellaneous works in the next Room include the following: 424. *Ribera (Spagnoletto)*, The Cid; 452. *B. van der Helst*, Violinist; 430. *Schalcken*, Henrietta van Haavens; *J. McLure Hamilton*, Card. Manning.

GALLERIES C & D contain a *Collection of paintings and sculptures bequeathed by Mr. Henry C. Gibson (1896). — GALLERY C. Left: 1008. *Jules Breton*, Potato harvest; 1004. *F. A. Bonheur*, Landscape and cattle; 1028. *Diaz*, The coming storm; 1009. *Cabanel*, Birth of Venus; 1017. *Courbet*, Great Oak of Ornans; 1094. *Zamacoïs*, Revelation; 1038. *Gérôme*, The Guardian; 1058. *Meissonier*, Cavalier waiting an audience; 1021. *Daubigny*, View on the Seine; 1086. *Troyon*, Crossing the ford; 1016. *Corot*, Landscape; 1032. *Dupré*, Sea-piece; *1063. *Millet*, Return of the flock; 1020. *Daubigny*, Landscape; 1010. *Calame*, Lake of Lucerne; 1096. *Zamacoïs*, Contemplation; 1034. *Fortuny*, Council House, Granada; 1095. *Zamacoïs*, On the lookout. — GALLERY D. Left: 1065. *A. de Neuville*, Surprise in the environs of Metz; 1001. *A. Achenbach*, Coast-scene; 1064. *Munkacsy*, Bringing in the night-rovers; 1039. *Van Marcke*, The herd; 1025. *Detaille*, Charge of cuirassiers at Reichshoffen, 1870; 1027. *Diaz*, Fontainebleau; 1068. *Martin Rico*, Venice; 1093. *Vibert*, Calling the roll after pillage; 1043. *H. Hansen*, Interior, Copenhagen; 1046. *Henner*, Nymph; 1048. *Isabey*, Departure of the Rouen diligence; 1082. *Alfred Stevens*, In the country; 1018. *Couture*, The thorny path; 1005. *Rosa Bonheur*, Highland sheep; 1015. *P. J. Clays*, Dead calm, Coast of Holland; 1090. *Van Marcke*, Seeking shelter.

GALLERY E. Modern European Works. 337. *Richard Wilson*, Falls of Tivoli; 514. *Fed. Farufini*, Cæsar Borgia and Machiavelli; *Griffens*, Marseillaise; *Picknell*, Road to Nice; 520. *Hermans*, Bal masqué.

CORRIDOR at the W. end of the building. 525. *Unknown Artist*, Lord Baltimore, founder of the State of Maryland; 305. *Cole*, Stable interior; 613. *Frank Duveneck*, Recumbent tomb-figure of Mrs. Duveneck (plaster cast; original in the Protestant Cemetery, Florence)..

ROTUNDA. Sculptures; 701. *John Lough*, Centaurs and Lapithæ (cast from original model); 913½. *Rodin*, Recumbent figure; *Wm. Rush*, *John Frazee*, Bronze busts of themselves (examples of the earliest American sculpture); *Houdin*, Paul Jones (bronze); *Chas. Grafly*, Bust, Dædalus. — The CORRIDOR to the right (S.) of the Rotunda also contains sculptures and casts, besides a large painting by *Snyders* (433). — E. CORRIDOR. No. 631. *A. Saint-Gaudens*, Bust of Gen. Sherman; 625. *Hiram Powers*, Proserpine.

GALLERY F. Temple (American) Collection. Among the best works here (arranged in alphabetical order) are: 1. *John W. Alexander*, Café; 3a. *T. P. Anshutz*, Becky Sharp; 4. *Cecilia Beaux*, New England woman; *12. *De Forest Brush*, Mother and child; *15. *Wm. M. Chase*, Lady with white shawl; 28. *C. H. Davis*, Brook; 34. *Duveneck*, Turkish page; 36. *Thos. Eakins*, Cello-player; 53. *Alex. Harrison*, The wave; 59. *Winslow Homer*, Fox-hunt; 74a. *W. S. Kendall*, Beatrice; 78. *Koehler*, The Holy-Day occupation; 90. *Gari Melchers*, Skaters; 119. *Chas. S. Pearce*, Fantasie; 121. *Wm. L. Picknell*, Marsh; 540. *A. Struys*, Forgotten; 173. *Tanner*, Nicodemus; 174. *Tarbell*, The golden screen; 183a. *J. H. Twachtman*, Sailing in the mist; 184. *B. Uhle*, Portrait; 189. *R. W. Vonnoh*, Companion of the studio, 190. November.

GALLERIES G, H, & J are used for temporary exhibitions.

PRINT ROOM (groundfloor). Field Collection: 401. *Bonifazio Veronese*, Last Supper; 410. Attributed to *Benozzo Gozzoli*, Virgin and Child; Prints bequeathed by John S. Phillips.

To the right, between Cherry and Race Sts., is the block containing the *Lyric* and *Adelphi Theatres* (p. 159).

Race Street (Pl. E-H, 5) leads to the left to LOGAN SQUARE (Pl. E, 5; p. 161), on the E. side of which stands the Roman Catholic Cathedral of SS. Peter & Paul (Pl. E, F, 5), a large edifice, with a Corinthian portico and a dome 210 ft. high. The interior is adorned with mural paintings, and over the high-altar is a Crucifixion by *Brumidi*. — On the S. side of the square, at the corner of 19th St., is the Academy of Natural Sciences (Pl. E, 5, 6). The society was founded in 1812. Its museum (open free 9-5, Sun. 1-5; entr. in 19th St.) contains extensive *Collections of Natural History, among which may be specified the Morton Collection of Crania (1200), the huge Collection of Shells (200,000 specimens), the Herbarium, the Peruvian mummies, and the Ornithological Cabinet, which furnished Audubon with many of his types. The library contains 50,000 volumes.

On the W. side of Broad St., between Race and Vine Sts., are the *Hahnemann College and Hospital* (Pl. F, 5), one of the chief homœopathic institutions of the kind. Beyond the *First Regiment Armoury* (Pl. F, 5) we cross above the subway of the *Reading Railway*. To the right, at the corner of Spring Garden St., is the *Spring Garden Institute* (Pl. F, 5), for instruction in drawing, painting, and the mechanic arts. Adjacent is the *Apprentices' Library* (50,000 vols.). Opposite are the **Baldwin Locomotive Works* (Pl. F, 5), a highly interesting industrial establishment employing 11,000 men and turning out six or seven locomotives daily (adm. after previous application, supported by an introduction). At the crossing of Broad and Spring Garden Sts. is a statue of *Matthew W. Baldwin* (1795-1866), founder of the works.

Spring Garden Street (Pl. D-G, 5), a pleasant residence-street, leads to the W. to (1 M.) the S. end of *Fairmount Park* (p. 173). On the S. side of this street, between 16th and 17th Sts., stands the **United States Mint* (Pl. F, 5), a large granite and marble building in a simple, massive, and imposing classical style, erected in 1900 at a cost of $ 2,400,000 (open free daily, 9-2, Sat. 9-11; visitors are shown round by guides, who do not expect a gratuity). The Philadelphia Mint, established in 1792, is the parent mint of the United States. The various processes of coining are interesting. The total value of the pieces coined here from 1793 to 1906 was: gold $ 1,162,238,883, silver $ 478,790,392, minor coins $ 41,535,405. The Mint also does considerable coinage for the South and Central American Republics and for the Philippines (85,958,230 pieces in 1903-7). In a room upstairs is a **Collection of American and other Coins.* The most interesting are the *Selections* in the central case, including the 'Widow's Mite' (No. 3116), found among the ruins of the Temple at Jerusalem. — Opposite the Mint, at the S.W. corner of 17th & Spring Garden Sts., is the *Spring Garden Branch* of the Free Library. — To the E. of Broad St., at the N.W. corner of Spring Garden St. and 13th St., is the *Philadelphia Normal School for Girls.* — The *Assembly Hall of the German Society of Pennsylvania*, farther to the E., at the corner of Marshall St., is said to contain the best German library in America (50,000 vols.).

A little farther on are the *Boys' Central High School* (Pl. F, 5; left), an unusually large and handsome structure, and the *Synagogue Rodef Shalom* (r.), in a Moorish style.

Fairmount Avenue (Pl. D-H, 4, 5), 1 M. from the City Hall, leads to the left to (1/2 M.) the **Eastern Penitentiary* (Pl. E, 4), a large and well-managed prison (1100-1200 inmates), rendered widely known by a somewhat sensational passage in *Dickens's* 'American Notes' (adm. by ticket from one of the Board of Inspectors). The penitentiary, which covers 11 acres of ground, is built on the radiating plan, and is conducted on the so-called 'individual' system, in which an attempt is made by discriminating treatment to bring about a reform of the criminals. There is about 1 warder to 30 prisoners (1 to 10 in similar English prisons); and most European visitors will be struck with what may seem the unreasonable comforts of the cells (many containing pictures, flowers, birds, etc.), the abundant rations, and the large amount of liberty granted to the prisoners. Knitting, carpentry, and the making of cigars, brushes, etc., are actively carried on. Dickens's criminal served 12 sentences in the penitentiary and was finally, at his own request, brought here to die. — *Girard College* (p. 169) lies about 1/2 M. to the N.

Farther up Broad St. are numerous handsome private houses, churches, and other edifices. At the N.W. corner of Broad St. and Girard Ave. (p. 169) is the handsome *Widener Mansion* (Pl. F, 4),

recently presented to the city and used as a branch of the Free Library (p. 165). Beyond Master St., to the left (No. 1424), is the elaborate home of the *Mercantile Club* (Pl. F, 3), and beyond Oxford St., on the same side, is the *Century Wheelmen Club* (Pl. F, 3). The *Grace Baptist Temple* (Pl. F, 2) has accommodation for 6000 worshippers. Connected with this church is *Temple University* (3500 students), the lectures of which are so arranged that the students may attend either in the morning, the afternoon, or the evening. Opposite is *Monument Cemetery* (Pl. F, 2), and 3/4 M. farther out are the *Base Ball Grounds* (Pl. F, 1). Beyond this Broad St. runs out to *Germantown* (p. 175), 6 M. from the City Hall.

Near Monument Cemetery (see above), at the corner of 18th St. and Diamond St., is the **South Memorial Church of the Advocate* (Pl. E, 2), a successful essay by Mr Burns (1897) in the French Gothic style of which Amiens Cathedral presents the best illustration. It is 165 ft. long, 105 ft. wide (at the transept), and 106 ft. high. The flèche over the crossing is 165 ft. high. The interior is profusely adorned with carving, and has 65 stained-glass windows by Clayton & Bell. The vaulting is, unfortunately, of wood only, painted to resemble stone.

Girard Avenue (Pl. A-H, 3, 4) runs to the W. from N. Broad St. to (1/2 M.) **Girard College* (Pl. E, 3, 4), one of the richest and most notable philanthropic institutions in the United States, founded in 1831 by *Stephen Girard* (1750-1831), a native of France, for the education of poor white male orphans (adm. on previous application to the Director or Secretary or at the office of the Girard Estate, 12th St., to the N. of Chestnut St., but strangers are admitted without this formality; no clergymen admitted). It now accommodates 1510 boys, and the value of Mr. Girard's bequest of $ 5,260,000 has increased to about $ 35,000,000 (7,000,000*l.*).

The **Main Building* is a dignified structure in the Corinthian style by T. U. Walter, resembling the Madeleine at Paris. In the vestibule are a statue of Stephen Girard, by *Gevelot*, and his sarcophagus; and a room on the groundfloor contains several relics of him. The other buildings, about a dozen in all, include school-rooms, dormitories, dining-halls (one for 1200 boys), a swimming-bath, a technical institute, and a chapel. The services in the last are conducted by laymen, as Mr. Girard's will forbids the presence of a clergyman within the college enclosure. The *Grounds*, which are 41 acres in extent, are lighted by seven electric masts, 125 ft. high, and contain a monument to former pupils who fell in the Civil War.

Opposite Girard College are the *Mary J. Drexel Home* and the *German Hospital* (Pl. E, 4). To the N. of Girard College are the *Women's Medical College* and *Hospital* (Pl. E, 3). — In Stiles St., to the E., between 17th and 18th Sts., are the large *Church of the Gesù* and various R. C. institutions.

South Broad Street (Pl. F, 6-8) leads to the S. from City Hall Square. Its intersection with Chestnut St., just to the S. of the City Hall, is environed with tall office-buildings (comp. pp. 162, 166). — To the right is the annex of the *Land Title Building* (p. 166, 319 ft. high), extending to Sansom St. Opposite (left), adjoining the Real Estate Trust Co. (p. 162), is the *North American Building* (Pl. F, 6; 20 stories), named after the newspaper which occupies

the upper five floors (fine view from the roof; free pass obtained on the 16th floor). Also to the right, at the opposite corner of Sansom St., stands the substantial building of the *Union League Club* (Pl. F, 6), the chief Republican club of Pennsylvania (1950 members). On the same side is the large *Bellevue-Stratford Hotel* (p. 158). Farther on, to the right, is the ***Art Club** (Pl. F, 6), in the Renaissance style, in which exhibitions of paintings, concerts, and public lectures are held. At Locust St., to the right, is the *Academy of Music* (p. 159), while to the left are the *Hotel Walton* (p. 158) and the *Broad Street Theatre* (p. 159). Lower down, to the right, are the *Horticultural Hall* (Pl. F, 7; flower-shows) and the *Beth-Eden Baptist Church.* At the corner of Pine St. (r.) is the **Pennsylvania School of Industrial Art* (Pl. F, 7), incorporated in 1876, with a special view to the development of the art-industries of Pennsylvania. A characteristic feature is the Department of Weaving and Textile Design. The Industrial Museum in Hall (p. 174) is connected with this excellent institution. — Below Pine St., Broad St. contains few important buildings. The visitor, however, should go as far as the ***Ridgway Library** (Pl. F, 8; open 9-5), which stands to the left, between Christian and Carpenter Sts., nearly 1 M. from the City Hall. This handsome building was erected, with a legacy of $ 1,500,000 left by Dr. Rush in 1869, as a branch of the Philadelphia Library (p. 165), and contains 120,000 vols., including many rarities. Adjoining the main hall is the tomb of the founder. — Broad St. ends, 4 M. from the City Hall, at *League Island Park*, 300 acres in extent. *League Island* itself, in the Delaware, contains a *U. S. Navy Yard*, among the chief objects of interest in which are the U. S. ram 'Katahdin', some monitors used in the Civil War, and a forty-ton crane. The new dry dock measures 750 ft. by 134 ft.

Market Street (Pl. A-H, 6), the chief wholesale business-thoroughfare of the city, contains little of interest to the visitor. A little to the E. of City Hall Sq. it passes the **Philadelphia & Reading Railway Station** (Pl. F, 6), a tall Renaissance building, with a train-shed little smaller than that of the Penna. R. R. (p. 162). The department store of *Gimbel Brothers* (Pl. G, 6), on the S. side of the street, between 8th and 9th Sts., is one of the largest in the world. The *Penn National Bank* (Pl. G, 6), at the corner of S. 7th St., occupies the site of the house in which Jefferson wrote the Declaration of Independence (comp. p. 163). The street ends at the Delaware, in a busy quarter of wharves, railway-stations, etc.

In N. 2nd St., a block above Market St., is **Christ Church** (Pl. H, 6; Epis.), erected in 1727-37, in the style of St. Martin's in the Fields, London, on the site of an older church of 1695, and attended by the Royal officers and early officials of the American Republic.

No. 239, Arch Street (Pl. E-H, 6), a little to the N., between 2nd and 3rd Sts., is the *House* in which the first American flag (13 stars

and 13 stripes) was made by Betsy Ross (Mrs. John Ross) in 1777. It is now owned by the city (open free, 9-5). — At 5th St. is the *Christ Church Burial Ground* (Pl. G, 6), with many interesting tombs. A railed opening in the wall (in Arch St.) shows the flat tombstone of *Benjamin Franklin* (1706-90) and his wife. Opposite, at the S.W. corner of 5th St., is the building which was originally the meeting-house of the Free Quakers, referred to in Dr. Weir Mitchell's 'Hugh Wynne', with a tablet in the gable stating that it was built in the year 8 'of the Empire'.

One of the most interesting historical buildings in Philadelphia is the **Old Swedes' Church** or *Church of the Gloria Dei* (Pl. H, 8; reached by 2nd St. tramway), in Swanson St., near the Delaware end of Christian St., erected in 1700, on the site of an old wooden church of 1646 (comp. p. 160). The descendants and successors of the Swedish founders ultimately joined the American Episcopal Church in a body, and the services have long been carried on in English (interesting tombstones). Adjacent is the *Cooper's Shop* where the ladies of Philadelphia provided meals for the troops passing S. during the war. In the neighbourhood is the huge *Spreckels Sugar Refinery*.

At *Shackamaxon*, in Beach St., is the small **Penn Treaty Park** (Pl. H, 4), supposed to occupy the spot where Penn made his treaty with the Indians in 1682, under an elm that has long since vanished (see p. 163; a compact, in the words of Voltaire, 'never sworn to and never broken'). The island in the river here is known as *Petty* or *Treaty Island* (Pl. I, 4). — A little farther to the N.E., at the foot of Ball St., are *Cramp's Ship Building Yards* (Pl. I, 3), one of the chief American yards for the building of iron and steel ships (U. S. war-vessels, etc.; pass necessary for visitors).

West Philadelphia, the extension of the city beyond the Schuylkill, contains many of the chief residence-streets and several public buildings and charitable institutions.

The ***University of Pennsylvania** (Pl. C, D, 6, 7), founded in 1740, and removed to West Philadelphia in 1872, occupies a group of ca. 30 buildings scattered over an area of 60 acres bounded by Woodland Ave., Cleveland Ave., Pine St., and 32nd St. (reached by Market St., Walnut St., or South St. cars). It has 4385 students.

The *College Hall* (Pl. 2; C, 7), or main building, stands facing Woodland Ave., between 34th and 35th Sts. The *Library* (Pl. 8; C, D, 6, 7) contains 272,000 vols. and numerous interesting relics, and is open to the public. — The *Medical School* (Pl. 9, 10; C, 7), *Dental School*, and *Law School* (Pl. 7; C, D, 6), are all provided with spacious and well-equipped buildings. — *Houston Hall*, behind College Hall, is the social centre of the University student life. — The *Wistar Institute of Anatomy & Biology* (Pl. 1; C, 7) is recognized as the headquarters of anatomical research in the United States and contains the first museum of human anatomy founded in America (1808; open free 9-4, Sat. 9-12). The *Morgan Laboratory of Physics*, the *Harrison Laboratory of Chemistry* (Pl. 6; D, 7), the **Gymnasium* (Pl. 5; D, 7), and the *Dormitories* (Pl. 3; C, 7) may also be mentioned. — *Franklin Field*, adjoining 33rd St., is the athletic ground of the University and contains a large stadium (Pl. D, 7).

The ***Free Museum of Science and Art** (Pl. 11, D 7; open free, 10-5, Sun. 2-6) occupies a tasteful building in South St., owing part of its inspiration to the Certosa di Pavia, and is divided into five sections. Its value is largely due to the fact that many of its contents were found by expeditions organized by the University itself, thus placing their provenance beyond doubt.

The *American Section* includes objects from cliff-dwellings, mound pottery, and objects from existing Indian tribes. — The main features of the *General Ethnological Section* are the collection from Borneo and the collections representing the life of the North American Indians. — The **Babylonian Section* chiefly consists of objects found by Professor Hilprecht, Dr. Peters, and Dr. Haynes in excavations at Nippur in Central Babylonia. Every period of Babylonian history, from B.C. 4500 to 700 A.D., is represented by inscriptions. — The *Egyptian Section* contains important series of objects illustrating the history, arts, and industries of Egypt from prehistoric times down to the Græco-Roman period. A tomb of the 5th dynasty is shown on special application. — The *Mediterranean Section*, including many Greek, Cypriote, Etruscan, and Roman antiquities, will also well repay the specialist. — The *Glyptic Section* consists of a collection of engraved gems presented by Professor Maxwell Sommerville (some of which, however, are believed to be spurious). In connection with it is an interesting reproduction of a Buddhist temple, also presented by Prof. Sommerville.

To the S. of the University are the large *Blockley Almshouses* (Pl. C, 7), the *Philadelphia Hospital*, and the so-called **Philadelphia Commercial Museums** (Pl. D, 7).

The Philadelphia Commercial Museums (open free daily) were established in 1895 to disseminate knowledge concerning the products, requirements, manners, and customs of different parts of the world. They contain large geographic exhibits from South and Central America, Mexico, the West Indies, Africa, Asia, and Oceanica. Illustrated lectures are given daily to classes from the public schools, for which use is made of the samples of raw and manufactured products from all parts of the world.

Connected with the institution are an active *Bureau of Information*, devoted to the development of the foreign trade of the United States, and a *Library*, containing official reports on foreign commerce, trade papers, and directories of the larger cities of the world.

A little to the N.E., at the corner of Chestnut St. and 32nd St., is the ***Drexel Institute** (Pl. D, 6), founded by A. J. Drexel and opened in 1892. The total cost of buildings and equipment was $ 4,500,000. Visitors are admitted (9-6).

The chief object of the institution is 'the extension and improvement of industrial education as a means of opening better and wider avenues of employment to young men and women.' It also provides free lectures, classical concerts, and evening classes and contains a free library, a picture gallery, and a museum. The latter includes collections of wood and metal work, ceramics, embroideries, and textiles. The picture-gallery contains a collection of paintings bequeathed by Mr. J. D. Lankenau and Mr. Drexel, including examples of recent and contemporary masters of the French, German, Italian, and other schools. The library contains a **Collection of MSS. and Autographs*, presented by Mr. G. W. Childs (incl. MSS. of Thackeray's lectures on the Four Georges, and Dickens's 'Our Mutual Friend', a vol. containing autograph-letters of every President of the United States, MSS. of Hood and Leigh Hunt, etc.). The institute is attended by 3000 students.

To the N. of Market St., between 42nd St. and 49th St., is the enormous **Pennsylvania Insane Asylum** (*Kirkbride's Hospital;* Pl. A, B, 6), situated in large grounds (no adm. on Sat. or Sun.). —

The *U. S. Naval Asylum* (Pl. D, 7) accommodates 150 old sailors. A little to the S. is the *Schuylkill Arsenal* (Pl. D, 8), now devoted to the manufacture of army clothing.

On the W. bank of the Schuylkill, a little below the B. & O. R. R. bridge, lies ***Bartram's Garden** or **Park** (beyond Pl. B, 8), which may be reached by the Elmwood Ave. trolley-line, or by train from the B. & O. station to *Eastwick's*. This park, 27 acres in extent, was part of the farm of the botanist *John Bartram* (1699-1771) and is interesting as the cradle of scientific botany in America, though, owing to a century's neglect, its collections are now rather picturesque than important. Bartram's house, built in 1731, is also quaint and interesting.

About 1½ M. to the S. of Bartram Park, between the Schuylkill and the Delaware, lies **Girard Park**, a small public park containing the house of Stephen Girard (p. 169). It may be reached by tramways running S. to Passyunk Ave. and thence by tramway to 21st St.

Philadelphia prides herself on few things more than on ***Fairmount Park** (Pl. A-D, 1-5), one of the largest city parks in the world, which covers an area of 3340 acres (Prater 4270, Richmond 2250). The park proper extends along both banks of the Schuylkill for about 4 M., and the narrow strip along the Wissahickon (p. 174), 6 M. long, is also included in the park limits. Its natural beauties are considerable, but comparatively little has been done to it by art. Several statues have been erected. — The principal entrances (2-3 M. from City Hall) are at the end of *Green St.* (Pl. D, 5), which is to be connected with the City Hall (p. 161) by the wide Park Boulevard, and of *Girard Ave.* (Pl. C, D, 4). The 'Park Trolley' (5 c.) affords a general view of the park.

Entering by the Green St. Gate, we have to our left the original *Fair Mount* from which the park takes its name. Close by (right) is the **Washington Memorial* (40 ft. high), by Rudolf Siemering of Berlin, erected in 1897. It consists of a platform bearing an equestrian statue of George Washington, with allegorical fountain-groups at the corners, representing the rivers Delaware, Hudson, Potomac, and Mississippi. The pedestal is also adorned with allegorical groups and medallions. On the top of the hill (*View) is a huge *Reservoir*, to which the river-water is pumped up by the adjoining *Water Works* (Pl. D, 5). A little farther on we cross a plaza, with a statue of *Abraham Lincoln*, beyond which is *Lemon Hill* (Pl. D, 4), crowned by a restaurant occupying the site of the house of Robert Morris. At the foot of the hill, on the bank of the Schuylkill, are the picturesque boat-houses of various clubs. To the right is a reproduction of *Thom's* statues of Tam O'Shanter and Souter Johnny at Ayr (see *Baedeker's Great Britain*). On reaching the handsome GIRARD BRIDGE (Pl. C, 4), 120 ft. in width, near the end of which are *Statues of Humboldt* and *Joan of Arc*, we cross it to the larger portion of the park on the W. bank of the river. To the left we see the *Zoological Garden* (p. 175). Following the *Lansdowne Drive*, we pass (to the left) the *Letitia House*, given by William Penn to his daughter Letitia and transferred hither from Letitia St., near Market and Second Sts. A little farther on we pass the *Stone Age Group* (by J. J. Boyle), bend round to the left, and pass through the *Smith Memorial Entrance* (Pl. B, 4), a structure of white granite, with bronze statuary, designed by J. H. Windrim and erected to officers of the Civil War with a bequest of $ 500,000 from the late Richard Smith, a type-founder (statue in front; on the columns,

Meade and Reynolds). Beyond this we reach *Memorial Hall (Pl. B, 3), built as part of the Centennial Exhibition of 1876, at a cost of $1,500,000 and now containing a permanent collection of art and industry (*Pennsylvania Museum of Industrial Art*; open from 9.30, on Mon. from 12, on Sun. from 1, to 1/2 hr. before sunset; catalogue 25 c.). In front of the building are two colossal winged steeds in bronze. The collections include paintings, sculptures, casts, stoneware, majolica, pottery, metal work, ivory carvings, electroplate reproductions, tapestry, furniture, models, Japanese work, objects from British India, embroideries, etc. The **Wilstach Collection of Paintings* (catalogue 25 c.), at present accommodated in Memorial Hall, includes examples of Achenbach, Bastien-Lepage, Rosa Bonheur, Bonington. Jan Both, Meyer von Bremen, Breton, Bronzino, Cabanel, Canaletto, Chase, Clays, Pieter Codde, Constable, Corot, Courbet, Crivelli (No. 77, winged altar-piece), Daubigny, Delacroix, Diaz, Dupré, Van Dyck, Fromentin, Gainsborough, Gérôme, Van Goyen, Harrison ('Le Grand Miroir'), Hondecoeter, Inness, Koninck (164), Lessing, Leys, Lhermitte, Van Marcke, Gabriel Max, Meissonier, Moroni, Munkacsy, Murillo, Van der Neer, Palamedes, Raeburn, Raffaelli, Guido Reni, Rico, Rousseau, Rubens, Ruysdael, Schreyer, Snyders, Jan Steen, Teniers, Thaulow, Tiepolo, Tintoretto, Troyon, Velazquez (310), Verboeckhoven, Vollon, Weenix, Whistler, Zamacoïs, Ziem, Zo, and many other modern masters, mainly French or American. The sculptures include works by Powers, Barye, and Rinehart (bust of Wm. P. Wilstach). — Among the monuments near Memorial Hall are *Statues of Goethe*, *Schiller*, and *Gen. Meade*. A little to the N. is the large *Horticultural Hall* (Pl. A, 3), another survival of the Centennial, finely situated above the Schuylkill and containing an admirable collection of tropical flora. In the vicinity are the picturesque *St. George's House* (the English building) and a few other Centennial buildings. [Those who wish may now return to the city by tramway from Elm Avenue, a little to the S. of Memorial Hall; Pl. A, B, 4.] A little to the W. of the Horticultural Hall is an allegorical *Fountain*, which lies at the base of *George's Hill* (*View). About 1 M. to the N. of this hill is the old *Belmont Mansion* (now a restaurant), and about 1 1/4 M. farther on we reach *Chamounix* and the N. boundary of the W. Park. The bridge here crosses the river to the quarter known as *Falls of Schuylkill*.

By turning to the right on the E. bank, we may follow the river-drive through the E. Park back to (3 1/2 M.) the Green St. entrance (see p. 173). In this case we skirt *Laurel Hill Cemetery (Pl. C, 1; entrances in Ridge Ave.), which here occupies the high bank of the river, containing many handsome monuments and affording fine views. Near the main entrance is a group, by *Thom*, of Old Mortality and Sir Walter Scott. Among the statues is one of *Harry Wright* (d. 1895), the 'Father of Base Ball'. In the park, to the S. of the cemetery, is the equestrian statue of *The Medicine Man* (Pl. C, 2), by C. E. Dallin (1904). Not far off is the **Statue of General Grant* (Pl. B, C, 3), by Dan. C. French and Potter (1899). To the S.W. of the E. Park Reservoir is *Mt. Pleasant*, once owned by Benedict Arnold (pp. 84, 89).

By turning to the left on crossing to Falls of Schuylkill (not far from which, in Clearfield St., is the small but beautiful Gothic *Church of St. James the Less*, with its churchyard, the burial-place of many of the principal Philadelphia families), we may follow the *Wissahickon Drive, which ascends the romantic valley of the *Wissahickon Creek*, an Alpine gorge in miniature, with sides 200-300 ft. high, to (6 M.) *Chestnut Hill*, affording a scene of singular loveliness to be included within the limits of a city. The gorge is crossed by several bridges, including the lofty viaduct of the Reading Railway (70 ft. high), near the entrance. Near the summit of the gorge (to the right) is a *Statue of William Penn*, inscribed 'Toleration'. Along the stream (on both banks) are several inns, frequented in summer for 'catfish and waffles'. Four-horse coaches usually ply along the Wissahickon Drive in summer. Two new approaches from Germantown and Chestnut Hill are the *Lincoln Drive* and *Cresheim Valley Road*.

The ***Zoological Garden** (Pl. C, 4; reached by Girard Ave. trolley), to the S. of West Fairmount Park, is one of the best collections of the kind in America (adm. 25 c., children 10 c.). It occupies a tract of ground once owned by John Penn, grandson of William Penn, and contains his house, the *Solitude* (1785).

Among other popular resorts of the Philadelphians are *Washington Park*, near Gloucester, visited for its 'planked shad', with a long pier, a theatre, etc.; *Lincoln Park*, on the Delaware, some miles below the city; and *Willow Grove*, with good music and other attractions, 15 M. to the N.E. of the city by the Reading R. R. (fare 20 c.) and reached also by tramway from various points. — Near Wayne Junction (see below) is *Stenton Park* (14 acres), with the old *Logan Mansion* (18th cent.).

Camden (*West Jersey Ho.*, S 2), an industrial and commercial city with (1905) 83,363 inhab., lies on the left bank of the Delaware, opposite Philadelphia (see Pl. I, 5-8; ferries, see p. 159). It was long the residence of the poet, *Walt Whitman* (1819-92). — It is the terminus of the *West Jersey* and the *Philadelphia & Atlantic Railways* (comp. pp. 158, 180).

From Philadelphia to Germantown and Chestnut Hill, 11 M., railway from the Reading Terminal Station in 30-40 minutes. — Beyond (5 M.) *Wayne Junction* (p. 158) the line turns to the N.W. and traverses *Germantown, the principal residential suburb of Philadelphia, stopping at several stations, of which (7 M.) *Chelten Avenue* is, perhaps, the nearest to the most populous parts of the district. Germantown is very prettily laid out, with fine trees and gardens, and contains some interesting old houses. The battle of Germantown, in which Washington was defeated by Lord Howe, was fought on Oct. 4th, 1777. The old *Chew House* (with marks of cannon-balls), the *Johnson House*, the quaint old *Mermaid Inn*, and the picturesque *Wakefield Mills* are interesting relics. The *Church of St. Michael* contains a fine stained-glass window (after Guido Reni). — 9 M. *Mt. Pleasant;* 9½ M. *Mt. Airy* (Cresheim Arms), with the Pennsylvania Institute for the Deaf and Dumb; 10 M. *Wyndmoor*. — 11 M. *Chestnut Hill*, a beautiful suburb.

Germantown and Chestnut Hill are also reached by the Penna. R. R. and by electric tramway. Among the stations on the former are (7½ M.) *Queen Lane* (near which is the Germantown Cricket Club) and (11 M.) *St. Martin's* (with the Horse Show Grounds and the Philadelphia Cricket Club). — One of the trolley lines follows Germantown Avenue, with the historic houses mentioned above. This avenue also contains the *Lutheran Orphans' Home & Asylum for the Aged* (No. 6950) and the *Lutheran Theological Seminary* (No. 7301).

From Philadelphia to West Chester, 27 M., railway from Broad St. Station in 1-1½ hr. This line crosses the Schuylkill, runs to the S. along its W. bank, turns to the right beyond *Woodland Cemetery*, and runs towards the S.W. — 11 M. *Swarthmore*, the seat of *Swarthmore College* (right), an important Hicksite Quaker establishment, attended by 300 male and female students. *West House*, now occupied by one of the professors, was the birthplace of *Benjamin West* (1738-1820). — 14 M. *Media* (370 ft.), a pleasant little town (3075 inhab.) in a pretty hilly district. — 16 M. *Williamson*, the site of the *Williamson Free School of Mechanical Trades*, founded in 1888 by Mr. I. V. Williamson at an expense of $2,125,000 (£425,000*l.*). It stands in pretty grounds of 200 acres (permission to visit obtained at 119 S. 4th S., Philadelphia). — 27 M. *West Chester*, a town with 9524 inhabitants.

Other attractive points within easy access of Philadelphia are *Bryn Mawr* (p. 188), *Mauch Chunk* (p. 183), *Long Branch* (p. 178), *Cape May* (p. 181), and *Atlantic City* (p. 180).

From Philadelphia to *Reading*, see R. 20; to *Baltimore*, see R. 25; to *New York*, see R. 16; to *Buffalo*, see R. 19; to *Pittsburg*, see R. 22; to *Erie*, see R. 21.

18. Summer and Winter Resorts of New Jersey.

Comp. Maps, pp. 3, 156.

a. From New York to Long Branch and Point Pleasant by Rail.

60 M. New York and Long Branch Railroad in 2-3 hrs. (fare to *Long Branch* $1, to *Point Pleasant* $1.31; return-fares $1.50 and $2.05). Tickets by this route are also available by the Sandy Hook route (p. 177). — Passengers start in Jersey City, either from the *Pennsylvania R. R. Station* (p. 10; ferries from 23rd, Desbrosses, and Cortlandt Sts.) or from the *Central R. R. of New Jersey Station* (p. 11; ferries from W. 23rd and Liberty Sts.).

The *Central R.R. of New Jersey* crosses *Newark Bay* to (10 M.) *Elizabethport* (p. 157) and then runs to the S. to (22 M.) *Perth Amboy* (25,895 inhab. in 1905), where it is joined by the *Penna. R. R.* train, coming viâ *Rahway* (p. 156). We then cross the *Raritan River* to (24 M.) *South Amboy*. 29 M. *Matawan*, for lines to *Freehold* (p. 177) and to *Keyport* and *Atlantic Highlands*. — 39 M. **Red Bank** (*Globe*, $2), on the estuary of the *Navesink* (view to the right), is a yachting and ice-yachting resort and the junction of the New Jersey Southern R. R. (for *Atlantic Highlands*, etc.). Farther on we cross the *Shrewsbury River*. — 44 M. *Branchport*.

45 M. **Long Branch**, see p. 178. The two following stations, *Hollywood & West End* (46 M.) and *Elberon* (47 M.) are practically parts of Long Branch and are described with it at p. 178.

The line now skirts the shore, affording good views of the ocean to the left. — 49 M. *Deal Beach* (Hathaway Inn, $4-6, well spoken of). — 51 M. *Asbury Park & Ocean Grove*.

Asbury Park (*Coleman Ho.*, from $5; *Brunswick*, from $4; *West End*, $3-4; *Columbia*, $4; *Ocean Ho.*, $3-4; *Plaza*, $4½-5, and many others; boarding-houses), a prosperous town with at least 50,000 annual visitors, is largely frequented by those who object to the religious management of Ocean Grove (see below), but appreciate the 'no licence' policy of its sister-town. It has a good beach, skirted by a plank-walk 1 M. in length, and is divided from *N. Asbury* on the N. by *Sunset Lake* and from Ocean Grove by the narrow *Wesley Lake*.

Ocean Grove (*Sheldon*, $2½-3½; *Arlington*, *La Pierre*, $2-3; *Atlantic*, from $2; many other hotels and boarding-houses), a seaside-resort established in 1870 by an Association of the Methodist Episcopal Church and now frequented yearly by 20-25,000 people.

This extraordinary settlement, possible only in America, in which many thousands of persons, young and old, voluntarily elect to spend their summer vacations under a religious autocracy, which is severe both in its positive and negative regulations, is curious enough to repay a short visit. It is bounded by the sea on the E., by lakes on the N. and S., and by a high fence on the W.; and its gates are closed at 10 p.m. daily and all day on Sunday. The drinking of alcoholic beverages and the sale of tobacco are strictly prohibited, and no theatrical performances of any kind are allowed. No bathing, riding, or driving is permitted on Sunday. Innumerable religious meetings of all kinds are held daily, the chief place of assemblage being a huge *Auditorium*, which contains a very

powerful organ and can hold 10,000 people. The annual *Camp Meeting* is the great event of the season. Near the Auditorium is a large *Model of Jerusalem*. One section of the place consists solely of tents. The excellent bathing beach is skirted by a plank-walk, 3/4 M. long.

We now pass the small seaside-resorts of *Avon*, *Belmar*, *Como*, and *Spring Lake*. 57 M. *Sea Girt* (see below), long the scene of the annual national rifle-shooting competitions of the Army and Navy.

60 M. **Point Pleasant** (*Carrollton*, $3\frac{1}{2}$; *Leighton*, $3-5$; *Pine Bluff Inn*, $2\frac{1}{2}-4$; *Beacon*, $2\frac{1}{2}$), a frequented watering-place, forming the terminus of the *New York & Long Branch Railroad*.

Beyond this point we may go by the *Pennsylvania Railroad* to *Bay Head*, *Seaside Park*, and other points on *Barnegat Bay* (p. 178).

b. From New York to Long Branch viâ Atlantic Highlands and Sandy Hook.

32 M. Steamer from *Pier 81* (N. River), at the foot of W. 42nd St., and also from *Pier 10*, at the foot of Cedar St. (Pl. B, 2), to (21 M.) *Atlantic Highlands* in 1¼ hr.; Railway thence to (11 M.) *Long Branch* in ½ hr. (through-fare $1). — This is the pleasantest route to Long Branch in fine weather.

The steamer affords an excellent view of *New York Harbour* (comp. p. 31) and lands at (21 M.) **Atlantic Highlands** (*Lockwood Ho.*, $3), a modern watering-place with (1905) 1480 inhab., at the base of the *Navesink Highlands* (200-300 ft.). — 24 M. *Highland Beach* (Swift Ho., $3-4), a small bathing-place, on the narrow strip of sand connecting *Sandy Hook* (p. 2) with the mainland. Adjacent is the *Navesink Lighthouse* (250 ft.), with two castellated towers, the light of which is visible for 40 M. Farther on life-saving stations occur at frequent intervals, as vessels mistaking the entrance to New York harbour in foggy weather are often wrecked on this coast. $25\frac{1}{2}$ M. *Normandie-by-the-Sea* (Hotel, $4-5).

$26\frac{1}{2}$ M. **Sea Bright** (*Pannacci*, from $5; *Octagon*, $4-5; *Sea Bright Inn*, $3-4; *Peninsula Ho.*, $4), one of the liveliest resorts on the coast, with golf, polo, cricket, and lawn-tennis clubs. The numerous ice-houses show that fishing is extensively carried on here. — 28 M. *Galilee*, a quaint fishing-village. — 29 M. *Monmouth Beach*, a group of private cottages, with a club-house and a casino; 30 M. *North Long Branch*; 31 M. *East Long Branch*, the station for *Pleasure Bay* (Avenel, $3\frac{1}{2}$).

32 M. *Long Branch*, see p. 178.

c. From Philadelphia to Long Branch.

94 M. Pennsylvania Railroad in $2\frac{1}{2}-4\frac{3}{4}$ hrs. (fare $2.20).

From Philadelphia to (49 M.) *Monmouth Junction*, see R. 16a, The Long Branch line here diverges to the right. 66 M. *Freehold*, with a monument commemorating the battle of Monmouth (1778); 74 M. *Farmingdale* (p. 179); 82 M. *Sea Girt* (see above); 88 M. *Asbury Park* (p. 176); 94 M. *Long Branch* (see p. 178).

Local trains also run from the West Jersey R. R. Station in Camden p. 175) to (82 M.) *Long Branch*, viâ *Whitings* (p. 179) and *Tom's River* (p. 179).

Long Branch. — There are RAILWAY STATIONS at *Long Branch* proper, for the old village, the pier, and the E. end (omn. to the best hotels 50 c.); at *West End & Hollywood*, near the best hotels; and at *Elberon*, the fashionable cottage part of Long Branch. The trains stop at all these stations.

Hotels. HOLLYWOOD, finely situated among trees, near the Hollywood station and ½ M. from the sea, with excellent cuisine, R. from $ 5 a day, food *à la carte*, open all the year. — WEST END, a huge caravanserai on the sea; SCARBORO, $ 4; these two nearest West End Station. — *ELBERON, from $ 6, at Elberon. — PANNACCI, $ 5, R. from $ 3; OCEAN HOTEL; BRIGHTON, from $ 3½; ATLANTIC; these near the pier and E. end. — *Boarding Houses*, $ 10-15 per week. — Cottages (*i. e.* villas), $ 400-4000 for the season.

Bathing. Hours for bathing announced by the hoisting of a white flag at the hotels (not hoisted in dangerous weather).

Long Branch, one of the most popular watering-places in the United States (50,000 summer-guests), takes its name from the 'long branch' of the *Shrewsbury River*. Permanent population (1905) 12,183. The original village lies about 1 M. inland, but the modern watering-place occupies a bluff, which here faces the sea, at a height of 20-35 ft. above the beautiful sandy beach. Along the edge of the bluff, which is being gradually worn away by the action of the sea in spite of the protection of strong bulkheads, runs the *OCEAN AVENUE, a wide road 5 M. long, which presents a scene of wonderful animation on summer afternoons and evenings, being crowded with vehicles of every description. At the E. end of the Avenue is an *Iron Pier*. Most of the hotels (see above) face the Avenue, which turns slightly inland beyond the West End Hotel and is thenceforward bordered with houses on both sides. The finest villas are at *Elberon*, but being mostly of timber hardly vie with the Newport cottages (see p. 249). Among the most interesting are that which was General Grant's summer-home for 16 years and the reddish brown house (Franklyn Cottage), a little to the W. of the Elberon Hotel, in which President Garfield died in 1881. The leading show-place of Long Branch is *Hollywood*, the estate of the late Mr. John Hoey (d. 1892), a little inland from the West End Hotel, the somewhat meretricious attractions of which, however, scarcely satisfy a fastidious taste. The flower-gardens and conservatories (open to visitors) are fine. The annual show of the *Monmouth County Horse Show Association* takes place in these grounds and attracts thousands of visitors. A *Grand Carnival* and *Lawn Tennis Tournament* are held at Long Branch in August.

Many pleasant drives may be made, the favourite being the BEACH DRIVE between Highlands (p. 177) and Bay Head (p. 177; 20 M.), of which Ocean Avenue is a part. — *Eatontown* (p. 179), 4 M. inland, is visited for its picturesque old mill. Farther on are *Shrewsbury* and the *Tinton Falls* (p. 179).

d. Barnegat Bay.

Barnegat Bay, 27 M. long and 1-4 M. wide, extends from Point Pleasant (p. 177) to a point a little to the N. of Atlantic City (p. 180). It is more like a lake than a bay, being separated from the ocean

by two long strips of sandy beach, and entered by a narrow inlet between them. The bay is a great resort of sportsmen, affording excellent fishing and wild-fowl shooting. Among the places chiefly resorted to are *Mantoloking* (Albertson, $2-3), *Seaside Park* (Manhasset, $2-2½), *Barnegat City* (Oceanic Ho., $2½), and *Beach Haven* (Engleside, $3½-5), on the island-strips; and *Forked River* (Lafayette Ho., $2), *Tom's River* Riverside, Ocean, $2), *Waretown* (Bayview, $2½), and *Barnegat* (Social, $2), on or near the mainland coast. The last are the special haunts of sportsmen. All these places are reached by the Penna. or Central New Jersey R. R.

e. From New York to Lakewood and Atlantic City.

136½ M. Central Railroad of New Jersey to (59½ M.) *Lakewood* in 1½-3⅓ hrs. (fare $1.45); to (136½ M.) *Atlantic City* in 3-6¼ hrs. (fare $3.25). — The train starts from *Jersey City* (see p. 10; ferries from 23rd and Liberty Sts.).

From *Jersey City* to (39 M.) *Red Bank*, see R. 18a. Our line here diverges to the right from the line to Long Branch (p. 177). — 41 M. *Shrewsbury*, a small town dating from 1665, with some old buildings. About 2½ M. to the S. are *Tinton Falls*. — At (43 M.) *Eatontown* we enter the *Jersey Pine Plains*, a stretch of forests, broken only by the settlements along the railway. The district has lately been coming into reputation on account of the health-giving odour of the pines. — At (52 M.) *Farmingdale* we cross the line from *Freehold* to *Sea Girt* (p. 177).

59½ M. **Lakewood** (**Laurel House*, **Laurel in the Pines*, belonging to the same proprietors, with 700 beds, from $4; **Lakewood*, with 600 beds, $5; *Palmer House*, from $3), a pleasant little settlement in the heart of the pine woods, has recently become a frequented winter-resort (Oct.-May) on account of its sheltered situation and comparatively high temperature (10-12° warmer than in New York). It belongs to an association, which has laid out pleasant drives and walks through the woods, the most popular being that through the *Cathedral Pines*. The village is adjoined by two pretty little lakes, *Carasaljo* and *Manetta*. The *Lakewood Golf Links*, which witness many important matches, are laid out on the grounds of *Georgian Court*, the magnificent residence of Mr. George Gould, whose picture-gallery contains famous examples of Rembrandt (Standard Bearer), Reynolds, Rousseau, and Fromentin.

67 M. *Lakehurst* (Pine Tree Inn, $3), the junction of a line to *Tom's River* (see above) and *Barnegat* (see above). At (73 M.) *Whitings* we cross the line from Philadelphia to Long Branch (see p. 177). — At (105½ M.) *Winslow Junction*, we reach the Penn. R. R. (Atlan. City Division). Hence to (136½ M.) *Atlantic City*, see p. 180.

The line we have been following goes on to (122 M.) *Vineland* (Baker Ho., $2), a glass-making and fruit-growing town, with (1905) 4593 inhab.; 134 M. *Bridgeton*, also a glass-making town (13,624 inhab. in 1905); and (144 M.) *Bay Side*, on the N. bank of the estuary of the Delaware.

f. From Philadelphia to Atlantic City.

1. Reading Railroad (*'Atlantic City Line'*) from *Kaighn's Point*, *Camden* (ferry from Philadelphia, see p. 158), to (56 M.) *Atlantic City* in 1-2 hrs. (fare $ 1.25). — 2. Pennsylvania R. R. (three routes): a. From Broad St. Station viâ the Delaware River Bridge at *Frankford* (p. 157; 65 M.) in 1¼-1⅓ hr. (fare $ 1.65). b. From Federal St. Station, Camden (ferry from Market St., Philadelphia, see p. 158) viâ *Haddonfield* (58 M.) in 1¼-2⅓ hrs. (fare $ 1). c. From Federal St. Station (ferry as above) viâ *Newfield* (64 M.) in 1⅔-2⅓ hrs. (electric service; fare $ 1). The last two belong to the *West Jersey & Seashore Division* of the Penna. R. R. — Some of the trains between Philadelphia and Atlantic City run at a rate of 60-65 M. an hour.

Routes 1 and 2b (see above) follow practically the same route and touch many of the same stations. Both pass through *Winslow Junction* (p. 179), 24½ M. from Camden by the first route and 27 M. by the second. 39 M. (41 M.) *Egg Harbor*, with manufactures of native wine. — 56 M. (58 M.) *Atlantic City*, see below.

Route 2c runs farther to the S. 9 M. *Woodbury;* 30 M. *Newfield;* 59 M. *Pleasantville.* 64 M. *Atlantic City*, see below.

On the 'Bridge' route the trains follow the main New York line of the Penna. R. R. to (9 M.) *Frankford*, cross the Delaware to *Fisher's Point*, and join R. 2b at *Haddonfield* (6 M. from Camden).

Atlantic City. — **Hotels.** *Marlborough-Blenheim, from $ 4, R. from $ 2; Shelburne, from $ 3½, R. from $ 2; *Brighton, Chelsea, from $ 4; *Chalfonte, Haddon Hall (these two under same management), Traymore, Dennis, these from $ 3½; *St. Charles, from $ 3; Rudolph, Royal Palace (frequented by Hebrews), from $ 3½; Young's, R. from $ 1½. All these are on the *Board Walk*, the most desirable situation. — Strand, *Galen Hall, from $ 3; Windsor, from $ 3, R. from $ 1; Wiltshire, Gladstone, Loraine, Raleigh, Garden (open in summer only), Pennhurst, Grand Atlantic, these from $ 2½ or $ 3 up. — **Boarding Houses.** *States Villa*, States Ave., from $ 15 a week; many others $ 10-25 a week. — *Cottages* from $ 200 for the season. — There are at least 900 hotels and boarding-houses in Atlantic City. The charges are highest in Easter Week and August, when it is advisable to secure rooms in advance. All the hotels give reduced rates by the week. The largest hotels remain open all the year round. — Information about hotels and lodgings may be obtained from the *Atlantic City Bureau of Information*, Pacific Avenue.

Restaurants at the Marlborough-Blenheim, Shelburne, Young's, Windsor, and Rudolph Hotels.

Amusements. *Apollo* and *Savoy Theatres*, both on the Board Walk. — *Variety Shows*, on Young's and Steel Piers. — *Concerts*, on the Piers, thrice daily. — *Carnegie Library*, Pacific Avenue.

Carriages from the railway-stations to the hotels, each pers. 25 c.; per hr. $ 1-1½. — One-horse Coaches ply to any point in the town for 10 c. each (for ten blocks), if engaged while in motion; if taken from a stand, 25 c. — Electric Tramways run along Atlantic Ave. and down several cross-streets to the Board Walk. — *Bath Chair* 25 c. per hr., with attendant 50 c.

Baths, at Galen Hall (see above; hydrotherapy, etc.) and at the Brighton Casino (p. 181; with swimming-pool).

Atlantic City, the most frequented seaside-resort of America, lies on *Absecon Island*, a small sand-strip, separated from the New Jersey Coast by 5 M. of sea and salt-meadows. It contains a permanent population of (1905) 37,593, which is increased about five-fold in August by visitors from all over the country. It is now also

frequented in spring and winter, the climate being comparatively mild and sunny and the air exceedingly tonic. The beach is one of the finest in America, and from 50,000 to 100,000 people have bathed here in one day (bath, with dress, 25 c.). It is bordered by a **Board Walk*, 40 ft. wide and 5 1/8 M. long, flanked on the landward side by hotels, shops, Japanese auction-rooms, and places of amusement. This walk (one section of which is now of steel and concrete) is brilliantly illuminated at night. The five *Piers* (1000-2500 ft. long; adm. 10 c.) are favourite resorts for roller-skating, concerts, 'net-hauls', etc. The *Brighton Casino* is an informal club, where the daily newspapers may be consulted.

Among the favourite EXCURSIONS are the *Beach Drive*, 10 M.; to *South Atlantic City*, 5 M.; to (7 M.) *Longport* (Aberdeen, Devonshire, from $ 3), near the S. end of the island, by road or electric railway (fare 10 c.); from Longport to *Ocean City* (see below) by electric railway (1/2 hr.) over the new bridge from Somers Point. *Brigantine Beach* (Holland Ho., $ 4), on an island to the N., may be visited by boat. The *New Boulevard* to the mainland is an excellent road for motoring or driving. — *Absecon Lighthouse* (160 ft. high) is open to visitors, 9-12. — *Boating* and *Sailing* are carried on mainly in the *Inlet*, at the upper end of the island (sail-boat $ 5-10 per day; sailing excursions, 25-50 c. each). — *Fishing* and *Wild Fowl Shooting* are also popular. — The *Country Club*, near Pleasantville (p. 180), includes excellent golf-links, tennis courts, and a polo field among its attractions. It may be reached by electric car or by the famous bicycle track that runs all the way from Atlantic City to Philadelphia.

g. From Philadelphia to Cape May.

1. WEST JERSEY & SEASHORE RAILROAD (Penna. System) from *Broad St. Station* viâ Delaware Bridge (comp. p. 180) in 2 hrs. (fare $ 2) or from *Camden* (ferry from Philadelphia, see p. 158) to (82 M.) *Cape May City* in 1 1/2-2 3/4 hrs. (fare $ 1.75). — 2. READING RAILROAD from *Kaighn's Point* (ferry, p. 158) to (78 1/2 M.) *Cape May* in 1 1/2-2 1/4 hrs. (fare as above). — STEAMERS also ply in summer down *Delaware Bay* to Cape May (6 hrs.; return-fare $ 1).

The West Jersey R. R. route diverges to the right from the Atlantic City line at (30 M.) *Newfield* (p. 180). 34 M. *Vineland*, see p. 179. — From (61 M.) *Sea Isle Junction* a branch-line runs to (5 M.) *Sea Isle City* and (16 M.) *Ocean City* (see below). 82 M. *Cape May* (see below).

The Reading route runs viâ (24 1/2 M.) *Winslow Junction* (p. 179) and then follows the Atlantic City R. R. 52 M. *Tuckahoe* is the junction of lines to (12 M.) *Sea Isle City* (Continental, $ 3; Bellevue, $ 2) and (13 M.) *Ocean City* (Brighton, Strand, Traymore, $ 2-2 1/2), two sea-bathing resorts. — 67 M. *Cape May Court House*.

78 1/2 M. **Cape May.** — *CAPE MAY HOTEL, from $ 4, R. from $ 2; LAFAYETTE, STOCKTON HOUSE (1000 beds), WINDSOR, $ 3-5; COLONIAL, from $ 3; CONGRESS HALL (750 beds), BALTIMORE INN, ELBERON, STAR VILLA, ALDINE, CHALFONTE, from $ 2 or $ 2 1/2; and many others. — *Boarding Houses*, $ 5-20 a week.

Cape May City, at the extreme S. point of *Cape May*, the E. arm of *Delaware Bay*, a village with (1905) 3006 inhab., a popular sea-bathing resort of the Philadelphians and also frequented to some

extent by Southerners and Westerners, is a smaller edition of Atlantic City (p. 180). Its beach, 5 M. long, is hard and smooth, affording an excellent course for automobiles. Great improvements have recently been made in reclaiming salt meadows and deepening the harbour. The sea-front is skirted by a fine boulevard and board-walk, extending to *Sewell's Point.* There are a *Golf Club* and a *Yacht Club.* Excursions may be made to *Cape May Point* (electric cars), *Cold Spring*, etc. The cape is named after a Dutch navigator, *Carolis Jacobsen Mey*, who visited Delaware Bay in 1623.

19. From Philadelphia to Buffalo.

a. Viâ Bethlehem and Mauch Chunk.

416 M. Philadelphia and Reading R. R. to (57 M.) *Bethlehem*, and Lehigh Valley R. R. thence to (359 M.) *Buffalo.* Through-trains in 11½ hrs. (fare $ 9.25; sleeper or parlor-car $ 2).

Philadelphia, see p. 158. The train traverses the N. part of the city and passes several suburban stations. 5 M. *Wayne Junction* (p. 158); 9½ M. *Elkins Park*, with the Ogontz Girls' School; 11 M. *Jenkintown* (p. 158). Beyond (33½ M.) *Sellersville* we penetrate the *Landis Hills* by a tunnel, ½ M. long.

57 M. **Bethlehem** (*Hot. Wyandotte*, at S. Bethlehem, $ 2½-3; *Eagle*, $ 2½; *Sun*, a modernized relic of the 18th century, $ 2), a thriving town of 20,534 inhab. (incl. *South Bethlehem*), lies on the *Lehigh*, which joins the Delaware, 12 M. lower down. It is noted as the chief American centre of the Moravian Brothers, who settled here under Count Zinzendorf in 1740-41. Many of the old Moravian schools and other buildings are still extant, and the town is an educational centre of some importance through these and more modern foundations (see 'History of Bethlehem', by *Bishop J. M. Levering;* 1904). *Lehigh University* (650 students), above the town, ranks very high for its work in engineering, physics, chemistry, biology, and metallurgy. Its library contains 90,000 volumes. The chief industries are silk-weaving and the making of brass, zinc, steel, and iron. The Bethlehem Steel Co. (3500 men) makes a large quantity of armour-plate, shafts for marine engines, and heavy ordnance. Electric tramways run to *Philadelphia*, *Easton* (12 M.; p. 144), etc.

The train now ascends the **Lehigh Valley*, with the tortuous stream to the right. Numerous iron-works are passed. 62 M. *Allentown* (Allen, $ 2½-3; American Ho., $ 2-2½), an iron and silk making town with 35,416 inhabitants. — 65 M. *Catasauqua;* 66 M. *Hokendauqua;* 67 M. *Coplay*, all with iron-works, blast-furnaces, and heaps of slag. The iron-works then disappear for a time and the scenery improves. 78 M. *Slatington* is the outlet for the most extensive slate-quarries in America. To the right is the bridge of the Lehigh and New England Railroad. About 2 M. farther on we penetrate the *Blue Mts.* by the **Lehigh Water Gap* (390 ft., *Craig*), in

which two railways, the river, and a canal are compressed between perpendicular cliffs. Beyond this point the valley expands, and the iron-works soon re-appear. 87½ M. *Lehighton* is the station for *Weissport* (to the right), the seat of a settlement of Moravian Indians, brutally massacred by the whites in 1757. — At (89 M.) *Packerton* are the workshops of the Lehigh Valley R.R. A little farther on the valley contracts and our line crosses to the N. bank of the river.

91 M. **Mauch Chunk** (530 ft.; *American*, $2-3), a small town with 4029 inhab., picturesquely situated on a rocky shelf on the brink of the river, in one of the narrowest parts of the valley, with mountains towering overhead, is visited annually by thousands of travellers. It has but two streets, one running along the river and the other extending at right angles to it up a cleft in the mountains; while the slope is so abrupt that the man who enters his front-door on the street-level may step into his back-yard from the second story window. The *Bear Mt.* (Indian, *Mauch Chunk*) from which it takes its name rises to a height of 700 ft. immediately above the town. Mauch Chunk lies in the midst of a rich coal-district, and an immense traffic in coals is carried on by the railways and canals.

The chief lion of Mauch Chunk is the *Switchback or Gravity Railroad, originally built in 1827 to bring the coals out from the mines to the river, but now used by pleasure-seekers only (round trip in 1½ hr., fare 75 c.; omn. to foot of railway 25 c.). The train is first drawn by a powerful stationary engine to (½ M.) the top of *Mt. Pisgah* (1370 ft.; view), whence it descends by gravity to (6½ M.) the foot of *Mt. Jefferson* (1530 ft.; *View). It is drawn up another inclined plane (gradient 1 : 4½) on this hill, and then runs on a level to (1 M.) *Summit Hill* (1485 ft.; Eagle Hotel, $ 2), a mining village with 2986 inhab., frequented by summer-visitors. *Burning Mine* here has been smouldering for 75 years. The descent to (9 M.) *Upper Mauch Chunk*, near our starting-place, is made by gravity in 25 minutes. — Good views are also obtained from *Prospect Rock* and *Flagstaff Peak* (1700 ft.; trolley).

We continue to follow the narrow winding gorge of the river. — 93 M. *Glen Onoko* (Hotel Wahnetah, $ 2½), a beautiful little glen, traversed by a stream forming a series of falls. It is much frequented by excursion-parties. — At (114 M.) *White Haven* (1140 ft.) we leave the river and ascend the mountains to the left. — 125 M. *Glen Summit* (1725 ft.; *Hotel, $ 3-4, meal-station), on the watershed between the Delaware and the Susquehanna, commands a distant view of the Alleghenies (W.). We now descend rapidly into the *Wyoming Valley* (p. 184), a beautiful *View of which, with the *Susquehanna River*, is suddenly disclosed to the right.

145 M. **Wilkes-Barré** (550 ft.; *Hot. Sterling*, $ 2½-5; *Redington*, from $ 2½, R. from $ 1), the chief town in the Wyoming Valley, on the E. bank of the Susquehanna, contains 51,721 inhab., who owe their prosperity to the rich coal-mines of the district. The chief manufactures are wire-rope, lace-curtains, and silk. *St. Stephen's Church* contains a large and fine bronze relief by *J. Massey Rhind*. Wilkes-Barré is connected by two bridges with *Kingston* (3846 inhab.; motor-car works) on the opposite bank.

The *Valley of Wyoming (a corruption of the Indian *Maughwauwama* or 'large plains'), the name given to this expansion of the Susquehanna Valley, is about 20 M. long and 3-5 M. wide and is enclosed by two parallel ranges of hills, 800-1100 ft. high. The *Susquehanna* ('broad and shallow river'), which has a total length of 400 M. from Otsego Lake (see p. 96) to Chesapeake Bay, enters the valley through the *Lackawannock Gap* and leaves it through the narrow *Nanticoke Gap*. Within the valley its course is generally placid, but it forms two sets of rapids (the *Wyoming* and *Nanticoke Falls*) and receives several tributaries from the mountains. Numerous coal-pits, culm-heaps, and smoking chimneys testify to the prevailing industry of the valley. A good *View of the valley is obtained from *Prospect Rock* (750 ft.), 2 M. from Wilkes-Barré. *Campbell's Ledge*, on the E. side of the Lackawannock Gap, is also a good point of view. — *Mountain Park* (stat. on the Central R. R. of New Jersey), 8 M. to the E., is a favourite resort of excursionists.

The name of the valley is widely known from the harrowing incidents narrated by Campbell in his 'Gertrude of Wyoming'. In June, 1778, a force of British troops and Indians entered the valley and defeated the settlers in a battle fought on July 3rd. The battle was followed by an atrocious massacre, in which the British officers were unable to set any bounds to the butchery of their savage allies, who, it is estimated, slew 300 men, women, and children. *Fort Forty*, the scene of the battle, 4 M. above Kingston (p. 183), is marked by an *Obelisk*, 62½ ft. high; and about 3 M. farther up is *Queen Esther's Rock*, where the half-breed queen of the Senecas tomahawked 14 defenceless prisoners.

About 18 M. to the W. of Wilkes-Barré, on a branch of the Lehigh Valley R. R., is the picturesque *Harvey's Lake* or *Lake Shawanese* (The Oneonta, $2.3½; Lake Hotel, $2), now a favourite resort. Farther off, reached by the same branch-railway, is (43 M.) *Ganoga Lake* (2320 ft.; North Mountain Ho., $2½).

From Wilkes-Barré to Nineveh, 93 M., *Delaware & Hudson R. R.* in 3½ hrs. (fare $2.84). This line traverses a coal-mining district. — 9 M. *Pittston* (see below); 11 M. *Avoca;* 16 M. *Minooka;* 19 M. *Scranton*, an important junction (p. 141); 35 M. *Carbondale* (Harrison Ho., New American Ho., $2), a busy coal-mining city with 13,536 inhabitants. — The train now ascends to (55 M.) *Ararat Summit* (2500 ft.), beyond which it descends into the valley of the *Susquehanna*. 71 M. *Jefferson Junction;* 73 M. *Lanesboro;* 81 M. *Windsor;* 85 M. *East Windsor;* 89 M. *Centre Village*. — 93 M. *Nineveh*, see p. 97.

The train now ascends along the E. bank of the Susquehanna. The Wyoming Monument (see above) is seen across the river to the left. — 153 M. *Pittston* (570 ft.; see above), with 12,556 inhab., lies near the point where the *Lackawanna* pours into the Susquehanna. Above rises *Campbell's Ledge* (see above).

Beyond Pittston the scenery is less interesting. At (179 M.) *Vosburg* we thread a tunnel 1000 yds. long and at (238 M.) *Athens* (770 ft.) we cross the *Chemung River*. — Beyond (239 M.) *Sayre Junction* (for lines to Auburn, Owego, Waverly, etc.) we cross the Erie R. R. (R. 12d). At (255 M.) *Van Etten* the line forks, the left branch running to Geneva (see below) viâ *Burdett* (3 M. from Watkins Glen, p. 134) and *Seneca Lake* (p. 134), while that traversed by most through-trains runs to the N. to (275 M.) **Ithaca** (p. 145) and skirts the W. side of *Cayuga Lake* (p. 145; views to right). On the opposite bank are salt-works. — 284 M. *Taughannock Falls* (p. 146; fine view of ravine but not of falls themselves). Beyond (299 M.) *Hayt's Corners* we lose sight of Cayuga Lake, while *Seneca Lake* (p. 134) comes into view (left). 313 M. **Geneva**, see p. 134. —

348 M. *Rochester Junction*, for (13 M.) *Rochester* (p. 135). — 379 M. *Batavia* (p. 135); 412 M. *East Buffalo* (p. 136).

416 M. **Buffalo**, see p. 136.

b. Viâ Williamsport and Emporium.

417 M. Pennsylvania Railroad in 13½-14½ hrs. (fares as at p. 182).

From Philadelphia to (105 M.) *Harrisburg*, see R. 22. Our line here diverges to the right from the line to Pittsburg and runs to the N. along the *Susquehanna*. — 158 M. *Sunbury* (450 ft.; 9810 inhab.), on the left bank of the wide Susquehanna, is an important outlet for the *Shamokin Coal District*. — At (160 M.) *Northumberland*, at the confluence of the N. and S. branches of the Susquehanna, *Dr. Joseph Priestley*, discoverer of oxygen gas, lived from 1794 till his death in 1804. He is buried in the cemetery here. — Farther on our line runs parallel with the Reading line.

198 M. **Williamsport** (*Updegraff*, $3-4; *Park*, 2-4), a city on the right bank of the S. (or W.) branch of the Susquehanna, with 28,757 inhab., chiefly engaged in the timber trade. The huge 'Boom' on the river here can contain 300 million feet of timber. Williamsport is a station of the long Seaboard Oil Pipe Line (comp. p. 201).

From Williamsport to Satterfield, 55 M., *Williamsport & North Branch R. R.* in 2¼ hrs. This line crosses the Phil. & Reading R. R. at (10 M.) *Halls* and traverses a picturesque district which has been ambitiously dubbed the 'Adirondacks of Pennsylvania'. — The chief resorts are *Highland Lake* (2000 ft.; Essick, Highland Ho.), reached by coach (1½ hr.) from (19 M.) *Picture Rocks* (670 ft.) or (21 M.) *Chamouni*; Eagles' Mere (2200 ft.; *Hotel Eagles' Mere*, *Lakeside*, *Raymond*, *Crestmont*, $3-4; *Forest Inn*; *Allegheny*, $2), reached by a short branch-line (10 M.) from (32 M.) *Sonestown*; and *Lake Mokoma* (La Porte Hotel), 4 M. from (37 M.) *Nordmont*.

From Williamsport to *Harrisburg*, see p 189.

We turn to the left (W.), cross the *Lycoming Creek* and the Susquehanna, and ascend on the right bank of the latter. 223 M. *Lock Haven*, another lumbering town (7210 inhab.), situated on the right bank of the Susquehanna. The scenery here and as we advance farther up the river is picturesque. We cross and recross the stream. — 250 M. *Renovo* (670 ft.; Renovo Hotel, $2), a summer-resort, finely situated in the Susquehanna valley, among hills 800-1000 ft. high.

At (263 M.) *Keating* (720 ft.) we leave the Susquehanna and begin to ascend the *Sinnemahoning*. The dreary district we now traverse is known as the *Great Horseshoe of the Alleghenies*. — 278 M. *Driftwood*, junction of a line to Pittsburg (p. 197). — 296 M. **Emporium** (1030 ft.; *Warner*, *City Hotel*, $2), a hill-surrounded village with 2463 inhab., is the junction of the Penna. R. R. route to Erie (R. 21). Our line runs to the N. to (320 M.) *Port Allegany*, and then follows the *Allegheny River* to (347 M.) **Olean** (*Olean Ho.*, from $2), on the Erie R. R. (p. 231), a large petroleum storing place. Pop. (1905) 10,163. — To the left, near (367 M.) *Franklinville*, is *Lime Lake*. — At (400 M.) *East Aurora* (Roycrofters Inn, D. 50 c.) is the interesting art-industrial colony of the ‚Roycrofters', of which

Mr. Elbert Hubbard is the head. Their productions include hand-made furniture, books, and works in clay, metal, and leather.

417 M. **Buffalo**, see p. 136.

20. From Philadelphia to Reading and Williamsport.

199 M. PHILADELPHIA & READING RAILROAD in 6½-8¼ hrs. (fare $ 4.68). — The PENNSYLVANIA RAILROAD (Broad St. Station) is also available, the trains following nearly the same route (fare as above; comp. R. 22). — Both lines traverse the Schuylkill Valley and connect the great anthracite coal-fields of Pennsylvania with the ocean.

Philadelphia, see p. 158. The train crosses the *Schuylkill*, touches the N. end of *Fairmount Park* (p. 173), and ascends the right bank of the river, parallel with the Penna. R. R. on the opposite bank. The valley is thickly populated and contains numerous factories and mills. — 17½ M. *Bridgeport* lies opposite **Norristown** (*Finley, Montgomery*, $ 2), a thriving manufacturing city (22,265 inhab.). — 24 M. *Valley Forge* (Washington Inn, $ 1½-2), the headquarters of Washington and the American army during the trying winter of 1777-78. The farm-house in which Washington had his quarters is still preserved (to the left of the railway), and the site is now a public park (with memorial chapel and monuments). — Beyond (28 M.) *Phoenixville*, at the foot of *Black Rock*, with 9196 inhab. and the huge Phœnix Iron and Steel Works, we thread a tunnel nearly ½ M. long. Our train then crosses the river, changing sides with the Pennsylvania line. We are now in the district of the so-called 'Pennsylvania Dutch', a hard-working race of Teutonic origin, speaking a curious dialect of South German, with an infusion of English. Near (41 M.) *Pottstown*, another iron-making place (13,696 inhab.), are the *Ringing Rocks*, emitting a musical sound when struck (electric tramway). We cross the *Manatawny*.

58½ M. **Reading** (270 ft.; *Mansion Ho.*, from $ 3; *Penn*, $ 2½-3½; *P. & R. Railway Restaurant*), a busy manufacturing city with 78,961 inhab., lies on a comparatively level plateau hemmed in by *Penn's Mt.* (see below) on the E. and *Neversink Mt.* (see below) on the S. The *Court House* is a handsome building, with a portico borne by six columns of the old red sandstone found in the adjacent mountains. The chief industry is iron-making, and the shops of the Reading Railway give employment to about 3000 men.

Penn's Mt. (1040 ft.), at the top of which is the *Summit Hotel* ($ 2½-3), is ascended by a 'switchback' railway. The *White Spot*, 1000 ft. above the river, a remnant of Potsdam sandstone lying unconformably on Laurentian rock, is a favourite point of view. — Another mountain-railway (views) climbs to the top of *Neversink Mt.* (850 ft.), with its large hotel ($ 3½). — Reading is an important railway-centre.

On the 'Columbia Division' of the Reading R. R., 20 M. from Reading, lies **Ephrata** (*Cocalico*, $ 1½), one of the centres of the sect known as *Dunkards* or *Tunkers*, whose characteristically simple costume is common in this whole region. The cells of the half-ruinous 'Brother' and 'Sister Houses' at Ephrata now contain about a dozen inmates only.

Beyond Reading our line continues to follow the Schuylkill Valley, and the long ridge of the *Blue Mts.* looms up ahead of us, changing from grey to blue as we approach it. — At (79 M.) *Port Clinton* (410 ft.), at the mouth of the *Little Schuylkill*, we pass through a gap in the ridge, similar to, but less picturesque than those mentioned at pp. 182, 140. Port Clinton stands on the S. edge of the great anthracite coal-region, and has a busy traffic in coal. Our railway forks here, the left branch going on to *Pottsville*, the right to Williamsport viâ the Catawissa Valley (see below).

From Port Clinton to Pottsville, 15 M., railway in 1/2-3/4 hr. — The line follows the Schuylkill. — 5 M. *Auburn;* 11 M. *Schuylkill Haven.* — 15 M. **Pottsville** (615 ft.; *Allan*, $2-3), a city with 15,710 inhab., in the gap where the river breaks through *Sharp Mt.* (1395 ft.), lies in the great S. or Schuylkill Coal Basin, which produces about one-fourth of the anthracite coal of Pennsylvania. The surrounding district is a network of railways.

The Williamsport train ascends the valley of the Little Schuylkill and traverses a busy coal-mining district. — 104 1/2 M. *East Mahanoy Junction.* Farther on we traverse the picturesque *Catawissa Valley.* At (146 M.) *Catawissa* (475 ft.) we cross the *Susquehanna.* 171 M. *Milton Junction;* 190 1/2 M. *Halls* (see p. 185).

199 M. *Williamsport*, see p. 185.

21. From Philadelphia to Erie.

Pennsylvania Railroad in 12 1/4-16 1/2 hrs. (fare $ 10.50).

From Philadelphia to (296 M.) *Emporium*, see R. 19b. — 316 M. *St. Mary's* (1670 ft.), in a lumbering and bituminous coal district, has a large German Benedictine college and convent. — 341 M. *Wilcox* (1525 ft.), with a large tannery. — 350 M. *Kane* (2020 ft.; Griffin Hotel, $ 2), with 5296 inhab., frequented for deer-shooting and fishing. We now begin to descend on the Lake Erie side of the ridge. — 379 M. *Warren* (1195 ft.), at the confluence of the *Allegheny* and the *Conewango*, is the junction of a line to Dunkirk (p. 353). — 408 M. *Corry* (1430 ft.), an industrial town (5369 inhab.).

From Corry to *Pittsburg* and to *Buffalo*, see p. 201. Corry is also the junction of lines to *Jamestown* (comp. p. 232), etc.

419 M. *Union City;* 426 M. *Waterford* (1190 ft.), on the *Le Boeuf Lake.* Beyond (434 M.) *Jackson* (1225 ft.) we cross the watershed between the Ohio and Lake Erie, here only 8 M. from the latter.

445 M. **Erie** (*Reed Ho.*, $ 2 1/2-4 1/2; *Liebel Ho.*, $ 2-3; *Massasauga Point*, on the lake), a lake shipping-port with a good harbour (enclosed by *Presque Isle*) and 52,733 inhab., occupies the site of a French fort built in 1749 and was the headquarters of Commodore Perry (p. 243) when he defeated the Anglo-Canadian fleet in 1813. It contains some handsome buildings, including the *Pennsylvania Soldiers' and Sailors' Home*, and has important manufactories of boilers and engines. It is the junction of lines to Buffalo (see p. 353), Pittsburg (see p. 201), etc.

22. From Philadelphia to Harrisburg and Pittsburg.

Comp. Map, p. 156.

354 M. Pennsylvania Railroad to (105 M.) *Harrisburg* in 2-4 hrs. (fare $ 2.60; parlor-car $ 1.50); to (354 M.) *Pittsburg* in 7½-11½ hrs. (fare $ 8.80; parlor-car $ 2. sleeper $ 2). This line, forming part of the fine through-route from New York to Chicago (see R. 29a), traverses the beautiful valleys of the Susquehanna and Juniata.

Leaving the handsome *Broad St. Station* (p. 158), the train crosses the *Schuylkill* and runs to the N.W. through *West Philadelphia* (p. 171), passing various suburban stations. 9 M. *Haverford College*, with a college of the Orthodox Quakers, situated in a park to the left. — 10 M. *Bryn Mawr* (415 ft.; Welsh 'great hill'; Bryn Mawr Ho., $ 2) is the site of ***Bryn Mawr College**, one of the youngest (1880) and best colleges for women in the United States (435 students). The tower of the main building is conspicuous to the right. The *Library* and *Cloisters* (1907), in the Jacobean style, are the most prominent of a group of buildings noteworthy for their architecture. — 12 M. *Villa Nova*, with a R. C. college, monastery, and farm. — To the left, at (16½ M.) *Devon*, is the large *Devon Inn* ($ 4-5), a favourite summer-resort. — At (20 M.) *Paoli* (535 ft.) the British defeated the Americans on Sept. 20th, 1777 (monument). It was the birthplace of '*Mad*' *Anthony Wayne* (1745-96; p. 83).

The train now leaves the region of suburban homes and enters the '*Garden of Pennsylvania*', one of the richest and most carefully cultivated farming districts in America. A splendid *View of the peaceful *Chester Valley* is disclosed to the right as we cross the ridge (550 ft.) of a S. outlier of the Alleghenies and emerge on the hillside. We follow the ridge for some time and then descend to the valley. — 32½ M. *Downingtown*. Iron-works and lime-kilns now appear. — At (38½ M.) *Coatesville* (380 ft.; 5721 inhab.) we cross the *West Brandywine* by a bridge 73 ft. high. — 51 M. *Gap* (560 ft.) lies in an opening in *Mine Hill*, on the watershed between the Delaware and the Susquehanna, and the train now descends into the *Pequea Valley*, with its fields of wheat, maize, and tobacco — Crossing the *Conestoga Creek*, which preserves the name of the Conestoga Indians, we reach (69 M.) **Lancaster** (360 ft.; *Stevens Ho.*, $ 2½; *Wheatland*, $ 2-3), a prosperous manufacturing town of 41,460 inhab. and an important market in tobacco and farm produce. The *Franklin & Marshall College* and the *Theological Seminary* here both belong to the German Reformed Church. *Woodward Hill Cemetery* contains the grave of President Buchanan (1791-1868). The district is largely peopled by the descendants of German colonists. A railway runs hence to *Hanover* and *Gettysburg* (p. 192).

Beyond (87 M.) *Elizabethtown* the train enters the picturesque defiles of the *South Mountain*. At (90 M.) *Conewago* we cross the stream of that name (view). Farther on we reach the W. bank of the *Susquehanna*, a wide, shallow stream, thickly strewn with rocks.

96 M. *Middletown*, with 5608 inhab., is an iron-making place. — At (102½ M.) *Steelton* (pop. 12.086) are the huge works of the Pennsylvania Steel Co., employing several thousand men.

105 M. **Harrisburg** (320 ft.; *Commonwealth*, *Lochiel Ho.*, $3-6; *Bolton*, from $2½), the capital of Pennsylvania, is finely situated on the E. bank of the Susquehanna, here about 1 M. wide. Pop. 50,167. The *Capitol*, conspicuously situated on a hill, has been rebuilt since 1897 at a cost of $13,000,000. The dome is adorned with paintings by Edwin Abbey. Opposite the W. façade is a *Statue of Gen. Hartranft* (1830-89), by Ruckstuhl (1898). In State St. is a *War Monument*, 110 ft. high. An enclosure in *Harris Park* contains the grave of John Harris, father of the founder of the town, and the stump of the tree to which he was tied by drunken Indians (1718), who meant to burn him alive. The Susquehanna is crossed here by four bridges.

From Harrisburg to Gettysburg, 46½ M., railway in 2-2⅓ hrs. — The train crosses the Susquehanna and runs to the S.W. — 21½ M. *Carlisle Junction*, for a branch-line to (6 M.) *Carlisle* (see below). Near (22 M.) *Mt. Holly Springs* we pass through a gap (1000 ft.) in the *South Mountain*. As we approach Gettysburg we traverse the field of the first day's battle (see pp. 193, 194). — 46½ M. **Gettysburg**, see p. 192.

From Harrisburg to Winchester, 116 M., *Cumberland Valley R. R.* in 4-4⅓ hrs. This line traverses the fertile *Cumberland Valley*, between the *Blue Mts.*, on the right, and the *South Mountain*, on the left. — The train crosses the Susquehanna as above. — 18 M. *Gettysburg Junction*, for the line to Gettysburg (see above). — 19 M. **Carlisle** (480 ft.; *Wellington*, $2-2½), a pleasant little town of 9626 inhab., with a *Government Indian Training School*, in which about 1100 young Indians are taught the arts and methods of civilization. Carlisle was Washington's headquarters during the 'Whiskey War' of 1794, and it was captured by Gen. Lee in 1863. — About 5 M. beyond (63 M.) *Greencastle* the train crosses the famous *Mason and Dixon's Line* (see p. 192) and enters *Maryland* ('Old Line State'), the northernmost of the old slave-holding states. — 74 M. Hagerstown (570 ft.; *Hamilton*, $2½-3, well spoken of; *Baldwin*, $2-3), a town of 13,591 inhab., on the *Antietam*, is the junction of lines to Washington (p. 211), Harper's Ferry (viâ Weverton; see p. 350, 351), and the Shenandoah Valley (R. 96). It was a centre of military operations in the Civil War. — At (81 M.) *Williamsport* Gen. Lee crossed the *Potomac* on his retreat after the battle of Gettysburg (p. 195). We here enter *West Virginia* ('Pan Handle State'). — At (94 M.) *Martinsburg* (635 ft.), on the *Tuscarora*, we intersect the B. & O. R.R. (p. 351). — 116 M. *Winchester*.

From Harrisburg to Reading, 53½ M., railway in 1¼-2 hrs. — The chief intermediate station is (25 M.) *Lebanon*. — 53½ M. *Reading*, see p. 186

From Harrisburg to Williamsport, 93 M., *Northern Central Railroad* in 2¼-3 hrs. This railway ascends on the E. bank of the Susquehanna to (53 M.) *Sunbury* (p. 185). Thence to (93 M.) *Williamsport*, see p. 185.

From Harrisburg to *Baltimore*, see p. 209.

Beyond Harrisburg the Penna. R. R. runs to the N. on the left bank of the Susquehanna to (110 M.) *Rockville*, where it bends to the W. and crosses the river by a bridge ⅔ M. long (*View). It then turns to the N. again and passes the *Dauphin Gap* (350 ft.). The river, now to the right, is wide, shallow, and nearly choked with grassy islets.

Beyond (120 M.) *Duncannon* the line leaves the Susquehanna and begins to ascend to the left through the valley of the 'beautiful

blue' *Juniata*, 'which has been the theme of more song and romance than almost any other American river' (Cook).

The *Scenery along this river, as we cross ridge after ridge of the Alleghenies, is of the most picturesque character; and the entire geological formation of Pennsylvania is exhibited to the student (views chiefly to the right). The district traversed is full of historical reminiscences of the struggles of the early Scoto-Irish colonists with the Indians and of the enterprise of *David Brainerd* and other missionaries. An immense traffic in coal and iron is carried on by this line, and the coal-trains are sometimes of extraordinary length.

At (138 M.) *Millerstown* (410 ft.) we thread the **Tuscarora Gap*, where the railway, river, road, and canal squeeze their way side by side through a narrow defile. This lay in the land of the Tuscarora Indians (see p. 130). Beyond (154 M.) *Mifflin* we pass through the picturesque **Lewistown* or *Long Narrows*, where the railway runs for several miles along one side of the stream, with the road and canal on the other. The slopes of the hills (1000 ft.) are covered with slate débris. — 166 M. *Lewistown* (500 ft.), a prosperous little place with 4450 inhab., lies at the mouth of the *Kishicoquillas Valley*. 191 M. *Mt. Union* lies at the entrance of **Jack's Narrows* (600 ft.), made by the river forcing its way through *Jack's Mt.* — 203 M. **Huntingdon** (*Leister*, $ 2), the largest town on the Juniata (6053 inhab.), occupies the site of the 'Standing Stone', where the Indians assembled for centuries to hold their grand councils.

A branch-line runs hence to (53 M.) *Bedford*, near which are *Bedford Springs* (Bedford Springs Ho., $ 3½-4; Chalybeate Hotel, $ 3).

At (209 M.) *Petersburg* (680 ft.) we leave the canal, which follows the Franktown branch of the river, and ascend the *Little Juniata*. — At (222 M.) *Tyrone* (905 ft.) we reach the E. base of the main range of the Alleghenies, turn sharply to the left (S.W.), and enter the *Tuckahoe Valley*. *Bald Eagle Valley* opens to the N.E.

Tyrone is the outlet for the important *Clearfield Coal Measures* (bituminous coal). — About 3 M. to the E. is the *Sinking Valley*, which takes its name from the *Sinking Spring*, a singular underground watercourse.

From Tyrone the train runs along the base of the Alleghenies (right) to (237 M.) **Altoona** (1180 ft.; *Logan Ho.*, from $ 2½; *Altamont Hotel*, from $ 2, R. from $ 1; *Railway Restaurant*), a busy town of 38,973 inhab., founded in 1850 by the Pennsylvania R. R. and consisting almost wholly of its workshops and workmen's houses.

The works cover 242 acres, employ 11,500 men, and produce 300 locomotives, 200 passenger-cars, and 1500 freight-cars annually, besides being the general repair-shops of the company. Some of the locomotives built here weigh 192 tons. — Those who wish to see the fine passage of the Alleghenies by daylight may pass the night here. Good views are obtained from *Prospect Hill* to the S. and *Gospel Hill* to the N.

Beyond Altoona the train gradually ascends to the summit of the mountains, climbing a gradient of 90 ft. to the mile. At (242 M.) *Kittaning Point* (1595 ft.) the line is carried round the famous **Horseshoe Curve** (views to the left), where the line crosses two ravines on a lofty embankment and cuts away the promontory dividing them. The sides of the curve are parallel, so that trains travelling

the same way may be moving in opposite directions. A little farther on we pass through a *Tunnel*, 2/3 M. long and 2160 ft. above the sea, crossing the Alleghenies and the watershed between the Atlantic and the Mississippi. The top of the ridge is 210 ft. above the tunnel.

The descent on the W. slope of the mountains is less abrupt. 249 M. *Gallitzin*, at the W. end of the tunnel, is named in honour of *Prince Demetrius Gallitzin* (d. 1840), who laboured as a missionary in this district for 40 years. — From (252 M.) *Cresson* (2015 ft.) coaches ply to *Loretto*, founded by Prince Gallitzin (see above). — We descend along the upper waters of the *Conemaugh*, and the scenery increases in attractiveness. Numerous vestiges are seen of the old *Portage Railroad*, which formerly served the traffic across the Alleghenies by a series of inclined planes, communicating at each end with canals. — Near (269 M.) *Mineral Point* (1415 ft.) we cross the Conemaugh. *Conemaugh Lake* (1460 ft.; see below) lies a little to the left. 273 M. *Conemaugh* (1275 ft.).

275 M. **Johnstown** (1185 ft.; *Merchants' Hotel*, $ 2 1/2-5), an iron-making city at the confluence of the Conemaugh and *Stony Creek*, was founded in 1791 by a German pioneer, named Joseph Jahns. It contains 35,936 inhab. and has to a great extent recovered from the effects of the inundation. The huge *Cambria Steel Works*, on the N. side of the river, give employment to 8000 men.

A glance at the deep narrow valleys with their high enclosing walls, at the junction of which the city lies, goes far to explain the possibility of so tremendous a catastrophe as that which overwhelmed Johnstown on May 31st, 1889. *Conemaugh Lake* (see above), 2 1/2 M. long and 1 1/2 M. wide, was reserved as a fishing-ground by a club of Pittsburg anglers, and its waters were restrained by a dam 1000 ft. long, 110 ft. high, 90 ft. thick at the base, and 25 ft. thick at the top. A continuance of violent rains filled the lake to overflowing, and all efforts to save the dam were fruitless. The break occurred about 3 p.m., a gap of 300 ft. being at once formed. The water that burst through swept down the valley in a mass 1/2 M. wide and 40 ft. high, carrying away everything in its way and completely destroying Johnstown and the other towns and villages in its track. The distance of 18 M. between Johnstown and the lake was traversed in about 7 minutes. The mass of houses, trees, machinery, railway iron, and human bodies was checked by the massive railway-bridge below Johnstown, and soon caught fire, probably burning to death some hundreds of persons imprisoned in the wreckage. The estimated loss of life varies from 2280 to 5000. The value of property destroyed was at least $ 10,000,000 (2,000,000*l.*).

The train descends along the left bank of the Conemaugh. 295 M. *Bolivar* (1030 ft.) lies at the entrance to the beautiful **Pack-saddle Narrows*, where the river breaks through the *Chestnut Range*, the W. ridge of the Alleghenies, which tower 1200 ft. above the water. At (300 M.) *Blairsville Intersection* (1115 ft.) the line forks, the main line leaving the Conemaugh and running direct to Pittsburg, while the right branch runs viâ *Blairsville* to *Allegheny City* (p. 200).

The district we traverse as we approach Pittsburg is a veritable 'Black Country', full of coal-pits, coke-ovens, and smelting-furnaces. 313 M. *Latrobe;* 323 M. *Greensburg* (1090 ft.). We approach the *Monongahela* at (344 M.) *Braddock* (15,654 inhab.), which marks

the scene of the memorable defeat of General Braddock on July 9th, 1755, on his expedition against Fort Duquesne (see p. 197). It was in rallying the defeated British forces that Washington won his first military laurels. The huge *Edgar Thomson Steel Works* are situated here (see p. 200). — 347 M. *Wilkinsburg* (926 ft.).

354 M. **Pittsburg**, see p. 197.

23. Gettysburg.†

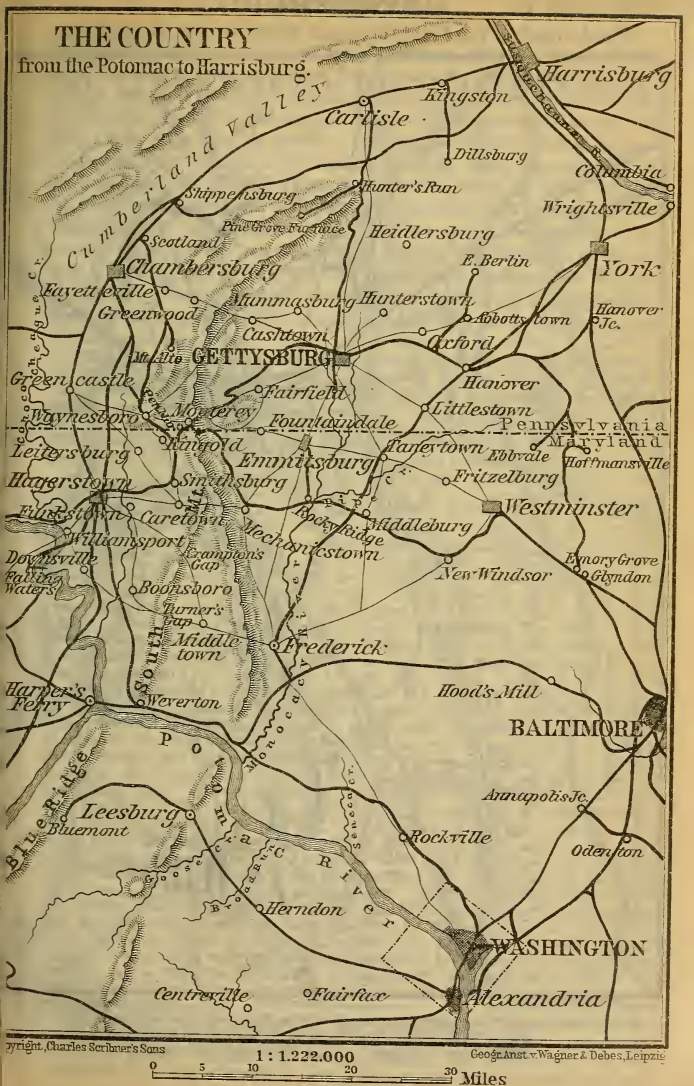
Gettysburg is reached from New York viâ the Pennsylvania or the Reading R. R. in 7½ hrs. (fare $ 5.64), from Philadelphia viâ the same railways in 4½-5¾ hrs. (comp. p. 189; $ 2.97), and from Washington viâ Baltimore in 4½ 6½ hrs. by the Western Maryland or the Northern Central R. R. (comp. p. 209).

Gettysburg (*Eagle*, *Gettysburg*, $ 2-3), a small town with (1900) 3495 inhab., lies about 40 M. to the S.W. of *Harrisburg* (p. 189) and 7 M. to the N. of the boundary between Pennsylvania and Maryland, the famous *Mason and Dixon's Line* (p. 189), which, before the war, marked the N. limit of slavery. On July 1st-3rd, 1863, the vicinity of this town was the scene of what is regarded as the chief contest of the American Civil War and as the 'turning-point of the Rebellion'. Many of the chief points are now accessible by electric railway.

The battle-ground covers about 25 sq. M. and lies mainly to the S.W. of the town. The *Gettysburg Battlefield Memorial Association*, an organization representing the soldiers engaged, has marked all the important points by monuments placed on ground acquired for the purpose. The tracts along the lines, aggregating 450 acres, are the land upon which the most important movements were executed. There are over 400 monuments on the field, erected with the utmost care in the exact localities, and standing in woods or open fields, by the roadside, on the stony ridges, in gardens, and being of all designs, executed in bronze, marble, or granite. Over $ 7,000,000 has been expended on the grounds and monuments. Several iron view-towers have been erected at the highest points. The battlefield is probably better marked, both topographically and by art, than any other battlefield in the world.

The long curving ridges and deep intervening valleys of the Allegheny mountain ranges cross Central Pennsylvania, the South Mountain ridge passing to the W. of Gettysburg with the Cumberland Valley beyond it, having two prominent towns, Chambersburg in Pennsylvania and Hagerstown, near the Potomac River, in Maryland. Two parallel ridges border the plain on which Gettysburg stands. The long *Seminary Ridge*, stretching from N. to S. about a mile to the W. of the town, gets its name from the Lutheran Theological

† This account of Gettysburg was prepared for *Baedeker's Handbook to the United States* by *Mr. Joel Cook*, of the 'Philadelphia Public Ledger', who was present at the battle as a special correspondent.



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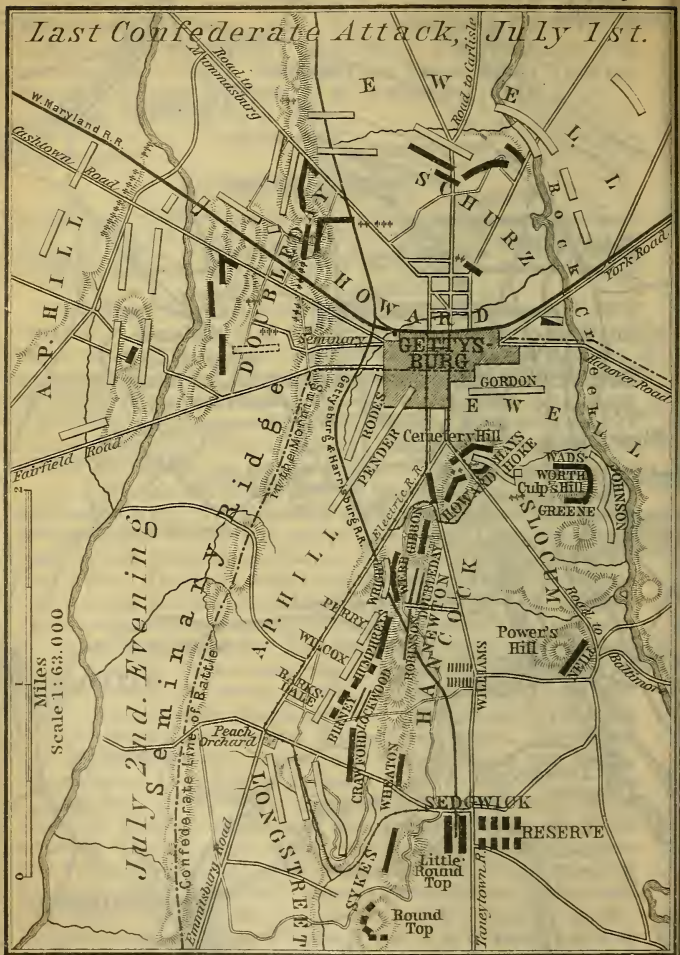
George Arnst v. Wagner & Debes, Leipzig

GETTYSBURG

Final Attack of the First Day, and Battle of the Second Day.



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The first day's battle is represented north of the Fairfield and Hanover roads.
The second day's battle south of the same roads.

Union troops *Confederate troops.*

Seminary standing upon it; and the *Cemetery Ridge*, to the S. of the town, which runs up its slopes, has, on its N. flat-topped hill, the village cemetery, wherein the chief grave was that of James Gettys, after whom the town was named. An outlying eminence known as *Culp's Hill* is farther to the E., making, with Cemetery Ridge, a formation bent round not unlike a fish-hook, with the cemetery at the bend and Culp's Hill at the barb, while down at the S. end of the long straight shank with the intervening rocky gorge of the 'Devil's Den', nearly 3 M. away, are two peaks formed of tree-covered crags, known as *Little Round Top* and *Big Round Top*. These long ridges with the intervale and the country around them are the battlefield, a topographical configuration displaying the ground to great advantage, the many monuments marking the respective lines of battle. Comp. Plan.

There were engaged in the battle about 80,000 men on the Union side and 73,000 Confederates the former having 339 cannon and the latter 293. Generals *George Gordon Meade* and *Robert Edward Lee* were the respective commanders, and it was among the most hotly contested battles of the war and the largest in actual numbers engaged. The Union loss was 3072 killed, 14,497 wounded, and 5434 missing, a total of 23,003; and the Confederate loss, 2592 killed, 12,709 wounded, and 5150 missing, total 20,451.

After their victory at Chancellorsville (p. 555) in May, 1863, the Confederates determined to carry the war to the N. into the enemy's country. Lee gathered nearly 90,000 men at Culpeper (Va.), including J. E. B. Stuart's cavalry force of 10,000 men. The Union army, commanded by General Hooker, was then encamped along the Rappahannock river, opposite *Fredericksburg* (p. 555), 150 M. to the S. of Gettysburg. Lee started to the N. across the *Potomac*, but Hooker did not discover it for some days, and then followed him. The Confederates crossed between June 22nd and June 25th and concentrated at *Hagerstown* (p. 189), in the *Cumberland Valley*, up which they made a rapid march, overrunning the entire country to the *Susquehanna River* (p. 184). Hooker was late in movement and crossed the Potomac to the E. of Lee on June 28th, thus making a northern race, with Lee in advance but on the longer route of the outer circle. There were 10,000 Union troops in the garrison at *Harper's Ferry* (p. 351) on the Potomac, and Hooker asked that they be added to his army; but the government declined, and Hooker immediately resigned his command. He was succeeded by Gen. Meade, who thus on the eve of the battle became the Union commander. This was on June 28th, when Meade was near the Potomac, and Ewell with Lee's advance guard had gone up the Cumberland Valley as far as *Carlisle* (p. 189) and was threatening *Harrisburg* (p. 189). The main body of Confederates lay at *Chambersburg*, with nobody opposing them. Lee, then hearing of the Union pursuit and being far from his base, determined to face about and cripple his pursuers, fixing upon Gettysburg as the point of concentration. He ordered Ewell to march to the S. from Carlisle and the others to the E. from Chambersburg through the mountain-passes. Meade's cavalry advance under Buford reached Gettysburg on June 30th, ahead of the Confederates, and Meade's army was then stretched for 60 M. back towards the Potomac. When he heard of Lee's changed tactics, Meade concluded that his extended formation was too risky and decided to concentrate in a strong position upon the *Pipe Creek Hills* in Maryland, about 15 M. to the S. of Gettysburg. Thus the battle began with each army executing a movement for concentration.

The battle opened on July 1st, the Union Cavalry to the W. and N. of Gettysburg becoming engaged with the Confederate advance approaching from the passes through the *South Mountain*. The cavalry was at first victorious but was afterwards overwhelmed by superior numbers, and

with their infantry supports under Gen. Reynolds, who was killed, were driven back through Gettysburg to the cemetery and Culp's Hill. These were manned by fresh troops that had come up. Meade was at Pipe Creek, laying out a defensive line, when he heard of Reynolds' death and the defeat, and he sent Hancock forward to take command, who determined that the Cemetery Ridge was the place to give battle. Ewell in the meantime had extended his wing round to the E. of Culp's Hill and held Gettysburg; but active operations were suspended, and both sides spent the night getting their forces up.

The second day opened with the armies confronting each other in line of battle, the Union forces along the Cemetery Ridge, and the Confederates upon the Seminary Ridge to the W. and also stretching round through Gettysburg, to the N. of the Cemetery, 2 M. to the E. along the base of Culp's Hill. In the long intervening valley and upon the ravines and slopes of the Cemetery Ridge and Culp's Hill the main battle was fought. Lee opened the attack by Longstreet advancing against the two Round Tops, but after a bloody struggle the Unionists held them. Sickles, who held the line to the S. of Little Round Top, thought he could improve his position by advancing ½ M. towards Seminary Ridge, thus making a broken Union line with a portion thrust out dangerously. The enemy fell upon Sickles, front and flank, almost overwhelming his line in the 'Peach Orchard' and driving it back to the adjacent 'Wheat Field'. Reinforcements were poured in and there was a hot conflict, Sickles being seriously wounded and his force almost cut to pieces.

Ewell then made a terrific charge from out of Gettysburg upon the Cemetery and Culp's Hill with the 'Louisiana Tigers' and other troops, effecting a lodgement, although the defenders wrought great havoc with their heavy cannonade. The Union guns on Little Round Top having ultimately cleared the 'Wheat Field', the combatants rested; Lee, inspirited by his partial successes, determining to renew the attack next morning.

On the third and last day Gen. Meade opened the combat by driving Ewell's forces from Culp's Hill early in the morning. Lee did not hear of this, but had an idea that both the Union centre and right wing had been weakened the previous day, and during the night, he planned an attack in front to be aided by a cavalry movement round that wing to assail the rear, thus following up Ewell's supposed advantage. To give Stuart with his cavalry time to get around to the rear, the front attack was not made till afternoon. Each side got cannon in position during the morning, Lee having 120 guns along Seminary Ridge, and Meade 80 in the Cemetery and along a low irregular stone pile, forming a sort of rude wall along the Taneytown road leading to the S. from Gettysburg. About 1 p.m. the Confederates opened fire, and the most terrific artillery duel of the war followed across the intervening valley, six guns being discharged every second. The troops, lying low, suffered little, but several Union guns were dismounted. After two hours' deafening cannonade Lee ordered his grand attack, the celebrated charge by Gen. Pickett, a force of 14,000 men with brigade front advancing across the valley. They had a mile to go, marching swiftly, but before they got halfway across, all the Union guns were trained upon them. The attack was directed at an umbrella shaped clump of trees, at a low point of the Cemetery Ridge, where the rude stone wall made an angle with its point outside. Hancock commanded this portion of the Union line, and while the grape and canister of the cannonade ploughed furrows through Pickett's ranks, when the column got within 300 yds., Hancock opened musketry fire with terrible effect. Thousands fell, and the brigades broke in disorder, but the advance, headed by Gen. Armistead on foot, continued, and about 150 men leaped over the stone piles at the angle to capture the Union guns. Lieut. Cushing, mortally wounded in both thighs, ran his last serviceable gun towards the wall, and shouted to his commander 'Webb, I will give them one more shot'. He fired the gun and died. Armistead put his hand on the cannon, waved his sword and called out, 'give them the cold steel, boys'; then pierced by bullets, he fell dead alongside Cushing. Both lay near the clumps of trees about 30 yds. inside the wall, their corpses mark-

ing the farthest point to which Pickett's advance penetrated, where the 'High Water Mark Monument' now marks the top of the flood tide of the rebellion, for afterwards there was a steady ebb. There was a hand to hand conflict, Webb was wounded and also Hancock, and the slaughter was dreadful. The Confederates were overwhelmed, and not one-fourth of the gallant charging column composed of the flower of the Virginia troops escaped, the remnant retreating in disorder. Stuart's cavalry failed to coöperate, having unexpectedly met the Union cavalry about 4 M. to the E. of Gettysburg, and the conflict that ensued prevented their attacking the Union rear. After Pickett's retreat there was a general Union advance which closed the combat. During the night Lee began a retreat, and aided by the heavy rains usually following great battles, the Confederates next day withdrew through the mountain-passes towards Hagerstown, and afterwards escaped across the Potomac. The day of Lee's retreat Vicksburg surrendered to Gen. Grant (see p. 587) and these two great events were the beginning of the Confederacy's downfall.

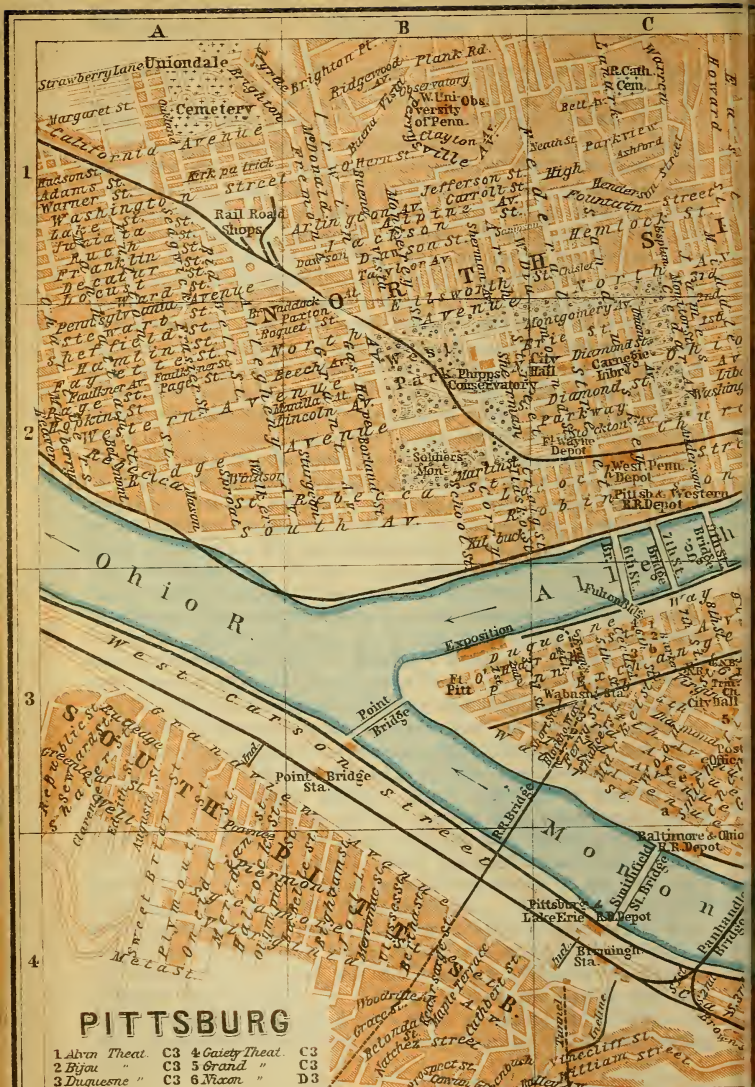
This battlefield is now covered with monuments and marking posts designating the positions of the opposing armies. Its survey is best begun by a tour to the N. and W. of the town, the scene of the first day's fight. The more interestig tour, however, is to the S. from Gettysburg. Ascending Cemetery Hill we pass by the roadside the house of Jenny Wade, the only woman killed in the battle, accidentally shot while baking bread. The rounded Cemetery Hill is a strong and elevated position bearing many monuments, and here, alongside the little village-graveyard, the Government has a National Cemetery of 17 acres, where 3572 soldiers are buried, over 1000 being the unknown dead. A magnificent battle monument rises above them, surmounted by a statue of Liberty, and having figures of War, History, Peace, and Plenty at the base of the shaft. This charming spot was the centre of the Union line, then a rough, rocky hill.

This cemetery was dedicated on Nov. 19th, 1863, Edward Everett delivering the oration; the monument was dedicated on July 1st, 1869. The cemetery cost $ 150,000. At the ceremony of its dedication President Lincoln was present, and made the famous 'twenty line address', which is regarded as the most immortal utterance of the martyr. The *Westminster Review* described it as an oration having but one equal, in that pronounced upon those who fell during the first year of the Peloponnesian War, and as being its superior, because 'natural, fuller of feeling, more touching and pathetic, and we know with an absolute certainty that it was really delivered'. The President, when requested to say a few words by way of dedication, drew from his pocket a crumpled piece of paper, on which he had written some notes, and spoke as follows. —

'Fourscore and seven years ago our fathers brought forth upon this continent a new nation, conceived in liberty, and dedicated to the proposition that all men are created equal. Now we are engaged in a great civil war, testing whether that nation, or any nation, so conceived and so dedicated can long endure. We are met on a great battlefield of that war. We are met to dedicate a portion of it as the final resting-place of those who here gave their lives that that nation might live. It is altogether fitting and proper that we should do this. But, in a larger sense, we cannot dedicate, we cannot consecrate, we cannot hallow this ground. The brave men, living and dead, who struggled here have consecrated it far above our power to add or detract. The world will little note nor long remember what we say here, but it can never forget what they did here. It is for us, the living, rather to be dedicated here to the unfinished work that they have thus far so nobly carried on. It is rather for us to be here dedicated to the great task remaining before us — that from these honoured dead we take increased devotion to the cause for which

they here gave the last full measure of devotion—that we here highly resolve that the dead shall not have died in vain—that the nation shall, under God, have a new birth of freedom, and that government of the people, by the people, for the people, shall not perish from the earth.'

From the cemetery the Lutheran seminary is seen a mile across the valley, the most conspicuous landmark of the Confederate line. Culp's Hill is to the S.E., strewn with boulders and timber-covered, the trees still showing marks of the fighting. The Emmettsburg road goes down the valley, gradually diverging from the Union line and crossing the fields that were the battle-ground on the 2nd and 3rd days. Many monuments line the road, some of great merit, and it leads to the 'Peach Orchard', where the line bends sharply back. Peach-trees are constantly replanted here as the old ones fall. The 'wheat-field' alongside is now a meadow; and beyond we go down among the crags and boulders of the 'Devil's Den', a ravine through which flows a stream coming from the orchard and wheat-field and separating them from the rocky 'Round Tops', the beetling sandstone crags of 'Little Round Top' rising high above the ravine. The sloping fields along the stream above the Den are known as the 'Valley of Death'. Many monuments among these rocks have been made with the boulders that are so numerous. 'Big Round Top' beyond is mounted by a toilsome path, and an Observatory on the summit gives a good view over the surrounding country and almost the entire battlefield. The summit, more than 3 M. to the S. of Gettysburg, has tall timber, preserved as in the battle. Cannon surmount the 'Round Tops', representing the batteries there during the battle. To the W., across the valley, is the long fringe of timber that masked the Confederate position on Seminary Ridge. A picnic ground has been located alongside the 'Round Tops', with access by railway; and large parties frequently visit this spot during the tourist-season. The lines of breastworks are retained, and not far away, upon the lower ground, are preserved the stone walls and the little umbrella-shaped grove of trees mentioned at p. 194. The 20th Massachusetts Regiment have brought hither a huge conglomerate boulder from their New England home and set it up as their monument. Their colonel, Paul Revere, was killed in the battle. Crossing the valley, the tourist returns to the N. along the Confederate line, where, however, there was no fighting until the scene of the first day's conflict is reached, to the W. of Gettysburg. Here a plain granite stone marks where Reynolds fell, just within a grove of trees. Reynolds, from his untimely death, is regarded as the Northern hero of the battle, as Armistead was the Southern. Near by the 'Massachusetts Colour-bearer' (p. 341) holds aloft the flag of the 13th Mass. Regiment, standing upon a slope alongside the railway, this striking monument marking the spot where he fell at the opening of the battle.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Uniondale
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Rail Road Shops
Allegheny Cemetery
Allegheny Observatory
W. Uni. Obs. University of Penn.
St. Cath. & Cem.
Bell Av.
Parkview
Ashford
High
Fountain
Hemlock
Jefferson
Carroll
Alpine
Allen
Dawson
Taylor
Clayton
Ridgewood
Plank Rd.
Brighton Pl.
Strawberry Lane
Margaret St.
California Avenue
Arkpatrick street
Madison St.
Adams St.
Warner St.
Washington
Lafayette
Fayette
Fulton
Franklin
Decatur
Locust
Wanda
Avenue
Perrysville Avenue
Sherman
Hazelwood
Fairhaven
Page
Chateau
Western Avenue
Ridge
Madison
Beech
Arch
Mortimer
Paquet
Parton
Addock
Lincoln Av.
Magnolia
Soldiers' Mon.
Marshall
Rebecca
South Av.
Mt. Troy
Troy Hill
Herrs Island
Ohio R.
Exposition
Point Bridge
West Carson street
Point Bridge Sta.
Pan Handle Bridge
Pan Handle R.R.
Baltimore & Ohio R.R. Depot
Smithfield St. Bridge
Pittsburg & Lake Erie R.R. Depot
Panhandle Bridge
Monongahela R.
Liberty Bridge
Liberty Tunnel
Liberty street
Wm. Penn Way
Grant
Ross
Wood
Cherry Way
Duquesne Way
Fulton Way
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2 Bijou " C3
3 Duquesne " C3
4 Gaiety Theat. C3
5 Grand " C3
6 Nixon " D3
Wagner & Debes' Geogl Estabt Leipzig
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Herr's I. Bridge
Herr Sta.
Riverside Penit'y
Lawrenceville Sta.
Spring Garden
Esplen
Troy Hill Road
Basins
Summit
Herman
Buchanan
Vinial
Carpenter Al.
River
16th St. Bridge
Penn
Liberty
Smallman
Railroad
Pennsylvania Incline
Basin
Union Sta.
Grant Boul.
Ridge
Crescent St.
Bedford
Centre
Breckenridge
Berthoud St.
Wadsworth St.
Robinson
Terrace
La Place
Webster
Wylie
Enoch
Rowley Av.
Franklin
Washington St.
Congress St.
Colwell St.
Forbes
Locust
Maria
Vickroy
Ivanhoe St.
Bluff
Watson St.
Gibbon St.
Lomond
Wyandotte
Soho Sta.
Mohawk
Beelen
Sunbury Al.
Mercy Hospital
2nd Avenue
Birmingham Sta.
First Lock
Dam
River
10th St. Br.
22nd Street Bridge
Glenwood Sta.
Clifton
Merriman
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Muriel St.
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Sarah
Carson
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Schenley Park
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D B I R M I N G H A M F
Metres

24. Pittsburg.†

Railway Stations. The chief are the *Union Station* (Pl. D, 3), of the Penna. R. R., for trains to Cincinnati, St. Louis, Chicago, New York, etc., the *Baltimore & Ohio* or *Monongahela Depot* (Pl. C, 4), for the B. & O. lines, the *Pittsburg and Lake Erie Depot* (Pl. C, 4), for trains to Chicago, Buffalo, New York, etc., and the *Wabash Station* (Pl. C, 3), for the Wabash lines.

Hotels *Fort Pitt (Pl. d; D, 3), R. from $ 1½; Lincoln (Pl. h; C, 3), 423 Penn Ave., from $ 3, R. from $ 1½; Henry (Pl. i; C, 3) 415 Fifth Ave., R. from $ 1½; *Schenley, a large house near Schenley Park (beyond Pl, F, 3), about 2 M. from the centre of the city (motor-bus from the station), from $ 3½, R. from $ 1½; Monongahela (Pl. a; C, 3), pleasantly situated at the river-end of Smithfield St., $ 3-4; Anderson (Pl. b; C, 3), centrally situated but somewhat noisy, $ 3-5; Duquesne (Pl. c; C, 3), Smithfield St.; Newell's, 343 Fifth Ave., R. from $ 1½; Griswold (Pl. e; C, 3), Smithfield St., R. from $ 1; Lorraine, North Highland Ave., a good family hotel, $ 2½-4; Seventh Avenue Pl. g; D, 3), $ 2½-3½, St. Charles (Pl. f; C, 3), $ 2-3; Colonial, with annex, Sixth St., $ 2-3.

Restaurants. **Fort Pitt Hotel* (see above); **Union Restaurant*, Frick Building (p. 199); *Farmers Bank Restaurant*, Fifth Ave.; *McCreery's*, in McCreery's Store, Wood St. and Sixth Ave.; *Nixon*, in Nixon Theatre Building.

Tramways (electric) run through the chief streets and to the suburbs. — Inclined Railways (10 in all), a characteristic feature of Pittsburg, lead to various points on the enclosing hills.

Theatres. *Nixon* (Pl. 6; D, 3); *Bijou* (Pl. 2; C, 3); *Alvin* (Pl. 1; C, 3); *Grand* (Pl. 5; C, 3); *Duquesne* (Pl. 3; C, 3); *Gaiety* (Pl. 4; C, 3).

Post Office (Pl. C, 3), Smithfield St., cor. of 4th Ave.

Pittsburg (745 ft.), the second city of Pennsylvania and one of the chief industrial centres of the United States, occupies the tongue of land between the *Monongahela* and the *Allegheny*, which here unite to form the *Ohio*, and also a strip of land on the S. side of the Monongahela. The sister city of *Allegheny* (p. 200), situated on the N. bank of the Allegheny and extending down to the Ohio, was incorporated with Pittsburg in 1907 and is now known as the *North Side*. Pop. (1900) of Pittsburg 321,616, of Allegheny City 129,896; in 1908 the united cities contained at least 550,000 inhabitants. The point of the tongue is quite flat, and also the immediate river-banks; but the tongue rises rapidly towards its root, and there are only narrow strips of level ground between the rivers and the abrupt heights on the S. side of the Monongahela and the N. side of the Allegheny. The residential quarters are mainly on the highlands of Pittsburg to the E. and those of Allegheny to the N. The rest of the delta and the river-banks are given over to manufacturing and are generally covered with a pall of dense black smoke. The rivers are crossed by numerous bridges.

Pittsburg occupies the site of the French *Fort Duquesne*, erected in 1754 and abandoned on the advance of Gen. Forbes in 1758. Its place was taken by the English *Fort Pitt* (see p. 199), and the laying out of the town of Pittsburg may be dated from about 1765. Its early importance was due to its trade with the Indians, and its commercial advantages are still conspicuous; but the great basis of the prosperity of the 'Iron City

† Pittsburg itself keeps *Eastern Time*, but trains starting here for the W. do so on *Central Time* (see p. xiv). Thus a train timed to start for Chicago at 11 p.m. starts at midnight by the clocks in the hotels.

has been the fact that it stands in the centre of one of the richest coal districts in the globe, the four counties immediately adjoining Pittsburg yielding ca. 52,000,000 tons of coal in 1907. Pittsburg also stands in the centre of the chief natural gas district (see below), and the use of this as fuel gave a great impetus to its manufacturing industry, though it is now mainly used for domestic purposes. The iron ore, of which Pittsburg uses about 8,000,000 tons annually, comes chiefly from Lake Superior (p. 396). The Pennsylvania, New York, W. Virginia, and E. Ohio oil-fields lie mainly in the basin of the Allegheny and Ohio Rivers to the N.E., S., and S.W. of Pittsburg and in 1907 yielded 25,500,000 barrels of petroleum. The staple manufactures of Pittsburg are iron, steel, and glass (comp. p. 200). The total value of its manufactures in 1900 was $ 203,261,251.

Natural Gas is one of the gaseous members of the paraffin series (of which petroleum is a liquid member) and consists mainly of marsh gas, the 'fire damp' of the miner. Its origin is the decomposition of forms of animal or vegetable life, and it is stored under pressure below strata of rock, being set free when those are pierced. Usually it has but little odour. Natural gas has been known to exist in America for over a century, but the first economical use of it was made in 1821, when the town of Fredonia, New York, was lighted with the product of a small well. Its use in iron-making in Western Pennsylvania began in 1874 at the mills of *Leechburg*, 34 M. above Pittsburg. It was first used in Pittsburg itself in 1886, when the gas from the Haymaker Well in *Murrysville*, the chief field of supply for Pittsburg, was conveyed in pipes to the city, a distance of 19 M. The annual consumption of natural gas at Pittsburg at present may be estimated at about 100,000,000,000 cubic ft., fully one-half of which is used for domestic purposes. Its price is 25 c. per 1000 cubic ft. to private individuals, and 7-15 c. to manufacturers. There is no question but that the supply is gradually giving out; and it is already too high-priced for the rolling mills, which are reverting to coal and other forms of fuel gas. The illuminating power of natural gas is low. About 1200 M. of piping are used in leading the gas to Pittsburg, in about 7 different lines. The pressure at the wells averages 100 lbs. per sq. inch and has been measured up to 700 lbs. In fuel value 12 cubic ft. of gas are equal to 1 lb. of coal. The process of drilling for gas is similar to that of drilling for petroleum. Those who wish to visit a gas-well (of no great interest) should apply at the office of the *Philadelphia Co.*, 437 Sixth Ave.

Smithfield Street (Pl. C, D, 3), diverging from *Liberty Avenue* (Pl. B-F, 3-1), not far from the *Union Station* (Pl. D, 3), leads to the river Monongahela; and the visitor is recommended to begin by following this street to the ($^1/_2$ M.) bridge (tramway) and crossing it to obtain the view of the city from *Washington Heights*. On the way we pass, to the right, the **City Hall** (Pl. C, 3). A little farther on, to the left, is the *Post Office* (Pl. C, 3). At the bridge are (r.) the *Monongahela Hotel* (p. 197) and (l.) the *Baltimore & Ohio Station* (Pl. C, 4; p. 197).

Crossing the *Smithfield Street Bridge* (Pl. C, 4), we should ascend to the top of *Mt. Washington* (370 ft.) by one of the three *Inclined Railways* (5 c.) on this side. These interesting, but at first somewhat startling, pieces of apparatus are worked by cables (not cog-wheels) and transport horses and carriages as well as persons.

The *View from the top of the busy cities of Pittsburg and Allegheny, the three rivers, and the encircling hills, all more or less enveloped in smoke, is highly imposing and picturesque. The deep basin in which Pittsburg lies has suggested the name of 'Hell with the lid off'. The view is most extensive on Sun., owing to the absence of smoke.

The finest building in Pittsburg is the ***Allegheny County Court House** (Pl. C, D, 3), in Grant St., a splendid example of

H. H. Richardson's treatment of Romanesque, erected in 1888 at a cost of $2,500,000 (500,000*l.*). The massive *Gaol* is connected with the Court House by a finely handled stone bridge. The main tower (*View) is 320 ft. high. The three entrances in the chief façade seem somewhat low and depressed for the size of the building.

The only remnant of *Fort Pitt* (Pl. B, 3; p. 197) is an old Block House, at the end of Penn Ave. (tablet, 1764). Hard by, on the Allegheny River, are the *Exposition Buildings* (Pl. B, 3), in which annual exhibitions are held.

The *Pennsylvania Incline* (Pl. E, 2), 17th St., is interesting from the manner in which it is led down over the top chord of the bridge spanning the Pennsylvania Railroad at its foot. — Other buildings of importance are the *Frick Building*, a granite office-structure of 20 stories at the corner of Fifth Ave. and Grant St. (Pl. C, 3); the *Carnegie Building* and the *Farmers' Bank Building* (these two also in Fifth Ave.); the *Union National Bank Building* and the *Commonwealth Trust Co. Building*, in Fourth Ave.; *Trinity Church* (Pl. C, 3) and the *First Presbyterian Church*, in Sixth Ave.; the *Fulton Building* (Pl. C, 3); and the *Bessemer Building* (the last two at the corner of Sixth St. and Duquesne Way). More to the E. are the *Academy of Our Lady of Mercy* (Pl. F, 3) and the new *Calvary Episcopal Church* (at the corner of Shady Ave. and Walnut St.), a beautiful example of 13th cent. Gothic by Ralph Adams Cram. The R. C. *Cathedral of St. Paul* also stands in Fifth Avenue, at the cor. of Craig St., about 1 M. beyond our plan.

To the E. of the city lies *Schenley Park* (beyond Pl. F, 2, 3), given to the city by Mrs. Mary E. Schenley and containing the fine *Phipps Conservatory* and the *Hall of Botany*, both presented by Mr. Henry Phipps. — Near the Forbes St. entrance to the Park is the great central building of the ***Carnegie Library of Pittsburg**, given to the city by Mr. Andrew Carnegie, in which are housed not only the main collection of the Library, but also two of the three departments of the **Carnegie Institute**. The structure, originally built in the Italian Renaissance style in 1892-95 at a cost of $ 800,000, was remodelled and enlarged in 1904-7 at an additional cost of $ 5,000,000. Branch-libraries have also been provided at a further cost of about $ 650,000. The Library operates more than 170 agencies for the free distribution of literature within Greater Pittsburg.

About one half the space in the enlarged building is occupied by the *Library* (280,000 vols.) and the *Music Hall* (2200 seats). The other half is occupied by the *Department of Fine Arts* and the *Natural History Museum* of the Institute. The collection of paintings consists mainly of French and American works. The grand staircase is being adorned with mural paintings by John W. Alexander. The *Technical Schools* form a third department of the Institute, and have buildings of their own in the Park, a short distance from the Library building.

The new buildings of the *University of Pittsburg* (1050 students) are also in Schenley Park.

To see the pleasant residence-quarters on the hills, we take a

Highland Avenue Electric Car, alight at its terminus, and walk up to (1/4 M.) *Highland Park* (5 M. to the N.E. of the City Hall), which commands a fine *View, especially of the Allegheny. The park contains the town-reservoirs and a good zoological collection. We may return to Pittsburg by the Negley Ave. cars.

No one should leave Pittsburg without visiting one at least of the great iron and steel works which have made its prosperity and reputation. Among these are the *Edgar Thomson Steel Works*, the *Homestead Steel Works*, the *Duquesne Steel Works*, the *American Bridge Co.*, the *Jones & Laughlins Works*, the *Oliver Iron & Steel Co.*, the *Crescent Steel Works*, and the *Pressed Steel Car Co.*

Those who wish to visit the four first-named works apply for a pass at the office of the Carnegie Steel Co., Carnegie Building, Fifth Ave. (Pl. C, 3). Half-a-day at least should be allowed for the visit. Perhaps the best way is to go to *Bessemer*, on the Penna. R. R. (from Union Station); visit the *Edgar Thomson Works;* proceed thence by the tramway passing the works to *Munhall* (5 c.), alighting at the gate of the *Homestead Works;* take the tramway thence to *Duquesne* (5 c.), getting off at the entrance to the *Duquesne Steel Works;* and return to Pittsburg by the Penna. R. R. to Fourth Ave. or Union Station. — The **Edgar Thomson Works** have an annual capacity for the production of 1,100,000 tons of metal, their chief product being steel rails. They include an interesting installation for the cleansing of blast furnace gas for use in gas engines. The **Homestead Steel Works** have an annual capacity of 400,000 tons of Bessemer steel and 1,500,000 tons of open hearth steel. Large quantities of nickel-steel armour-plates are made here. Natural gas is largely used for fuel at both works. The two works employ about 6000 men. The **Duquesne Steel Works**, on the Monongahela, 3 M. above Homestead, have four of the greatest blast furnaces in the world, producing 2200 tons of pig iron per day. — The *American Bridge Works* at Ambridge, on the Ohio, 20 M. below Pittsburg, are the largest and most modern works of the kind in the world.

The **American Iron & Steel Works** *(Jones & Laughlins)* lie on both banks of the Monongahela, which is crossed by a bridge 1090 ft. long. They include the largest rolling-mill in the world. Other works of the same company are situated at *Aliquippa*, on the Erie R. R. — The *Westinghouse Electrical Works* at East Pittsburg also repay a visit.

The *Pittsburg Plate Glass Works* and the *Macbeth Glass Works* (producing 50,000 dozen lamp-chimneys per week) are at *Charleroi*, 40 M. up the Monongahela, and may be reached either by train or boat (see below). — Glass works at *Ford City*, see p. 201.

Allegheny City or **North Side** *(Hotel Federal)*, on the N. bank of the Allegheny, offers few attractions to the visitor. The value of its manufactures in 1900 was $ 54,137,000. Taking a tramway-car in 6th St. (Pl. C, 3), we cross the river and follow *Federal St.* to the *City Hall* and the **Carnegie Free Library* (Pl. C, 2). In front of the latter stands a monument to *Col. James Anderson* (1785-1861), by D. C. French. Thence we may follow Ohio St. to the S.W., passing *St. Peter's Church*, to the *Park* (Pl. B, 2). To the left rises a hill crowned by the *Soldiers' Monument* (Pl. B, 2), to which we should ascend for its *View of the two cities. The *Western Penitentiary* is so called in contradistinction to the Eastern Penitentiary at Philadelphia (p. 168).

River Navigation. Through the Monongahela, Allegheny, and Ohio more than 20,000 M. of inland navigation are open to the steamers of the cities of Pittsburg and Allegheny, and regular communication is thus

kept up with *New Orleans* (p. 631), 2000 M. distant. The tonnage of the river-craft of Pittsburg (4,000,000 tons) is said to be greater than that of New York or all the Mississippi ports put together. This is owing to the enormous coal traffic, and stern-wheel tug-boats may frequently be seen conveying a train of barges with a total cargo of 25,000 tons of coal. — By the construction of a series of six large dams on the Ohio, at a cost of at least $ 5,000,000, the harbour of Pittsburg practically extends to (30 M.) *Merrill*. Much has also been done to improve the navigation of the Monongahela and the Allegheny.

A trip up the *Monongahela* by steamer, as far as *Monongahela City* or *Brownsville*, is very interesting. The river is lined with coal 'tipples'.

From Pittsburg to Connellsville, either by the *S. W. Pennsylvania R. R.* (56 M.) or by the *B. & O. R. R.* (57 M.), in 1¾-3 hrs. — *Connellsville* (Yough Ho., $ 2), a town of 7160 inhab., on the *Youghiogheny*, lies in the midst of one of the two chief coke regions in the world, the other being that of Durham, England. About 20,000,000 tons of coke are produced here annually.

From Pittsburg to Buffalo, 269 M., *Pennsylvania R. R.* in 8-8¾ hrs. This line runs through one of the chief petroleum districts, and numerous oil-wells, in operation or deserted, are passed. Petroleum is obtained from oil-bearing sands by pipes of varying diameter, sunk to a depth of 300-3000 ft. The oil is transmitted to the large storage tanks of the Pipe Line Companies by pipe lines, which are sometimes hundreds of miles long. — The railway at first follows the *Allegheny River*. 41 M. *Ford City*, with the largest plate-glass works in the world (64 acres under roof). — 132 M. **Oil City** (*Arlington*, $ 2-3), a city of 13,264 inhab., is the great centre of the Oil District, and all the processes of procuring, preparing, and shipping the oil may be conveniently observed here. In 1892 Oil City was the scene of a terrible disaster, caused by the catching fire of a large petroleum tank. The burning oil, overspreading the water in the creek, set fire to many buildings and caused the loss of many lives. — The train now follows the valley of *Oil Creek*, with many abandoned wells. It is calculated that somewhere about 1865 this valley, between Oil City and Titusville, contained 75,000 people. At least 60 million barrels of oil valued at $ 200,000,000, were taken from the valley in ten years. The present yield is insignificant. — 148 M. Titusville (*Mansion Ho.*, $ 2), with 8244 inhab., is another busy oil-centre. — 175 M. *Corry* (p. 187). — 205 M. *Mayville* (Peacock Inn, from $ 2), at the head of *Chautauqua Lake* (1300 ft.), is the junction for (4 M.) *Chautauqua* (see pp. 231, 232). — 219 M. *Brocton*, and thence to (269 M.) *Buffalo*, see R. 50a.

From Pittsburg to Erie, 148 M., *Pennsylvania R. R.* in 4¾-5⅓ hrs. — 17 M. *Economy*, a picturesque village on a plateau above the Ohio, owned by the Harmonists, or disciples of Father Rapp. Most of the houses are now rented to outsiders, as the community has dwindled to a mere handful. — 25 M. *Rochester* (p. 349); 47 M. *Lawrence Junction;* 92 M. *Jamestown;* 133 M. *Girard*, and thence to (148 M.) *Erie*, see R. 50a.

From Pittsburg to Cleveland, 150 M., *Pennsylvania R. R.* in 3½-6 hrs. (*B. & O. R. R.* in about the same time). — This line diverges from that to Erie at (25 M.) *Rochester* (see above). 48 M. *Wellsville;* 93 M. *Alliance* (p. 349); 124 M. *Hudson*. — 150 M. *Cleveland*, see p. 353.

From Pittsburg to Wheeling, 68 M., *Baltimore & Ohio R. R.* in 2-2¾ hrs. — *Wheeling*, see p. 352.

From Pittsburg to *Columbus* and *Cincinnati*, see R. 48b; to *Chicago*, see R. 48b.

25. From Philadelphia to Baltimore.

Comp. Map, p. 156.

96 M. Pennsylvania Railway in 2-3¼ hrs. (fare $ 2.40; parlor-car 50 c.). From New York (186 M.) in 4¼-6 hrs. (fare $ 4.65). — The Baltimore & Ohio R. R. follows almost the same route (similar times and fares), starting from the 24th & Chestnut Sts. Station (p. 158) and running to the Mt. Royal and Camden Stations at Baltimore (p. 262).

Philadelphia (Broad St. Station), see p. 158. The train crosses the *Schuylkill* and runs to the S.W., not far from the W. bank of the *Delaware*. 1 M. *West Philadelphia* (p. 171). The *University of Pennsylvania* (p. 171) and the *Blockley Almshouses* (p. 172) are seen to the right. 13½ M. *Chester*, with the Pennsylvania Military Academy and 33,988 inhab., was settled by the Swedes in 1643. Between (17 M.) *Linwood* and (19 M.) *Claymont* we cross a small stream and enter the *State of Delaware* ('Diamond State'). Farther on we cross the *Brandywine* (see below) and reach —

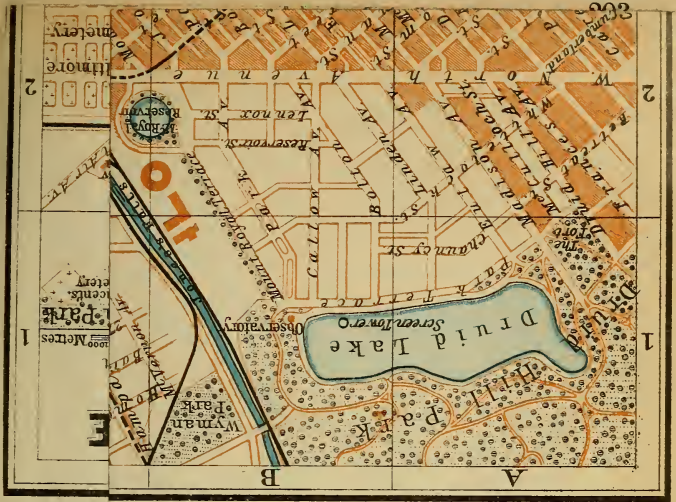
27 M. **Wilmington** (*Clayton Ho.*, $ 2½; *Wilmington*, $ 2-3½), the chief city of Delaware, situated at the confluence of the Delaware, Brandywine, and *Christiana*, with 76,508 inhab. and extensive manufactures, including the making of iron, steel, carriages, railway-cars, iron and wooden ships, gunpowder (Dupont Works), morocco and other leather, and cotton goods (total value in 1900, $ 28,372,000). The *Old Swedes Church* (seen to the right as we enter the station) dates from 1698 and marks the site of the first Swedish colony in America and the first permanent European settlement in the valley of the Delaware (1638). At the entrance of *Rockford Park* is a bronze statue of *Thomas F. Bayard* (1828-98), a native of Wilmington, by Miss Effie Stillman (Mrs. Wm. Ritchie), erected in 1907.

Picturesque walks may be taken in the **Glen of the Brandywine* (public park). — The *Battle of the Brandywine*, in which Washington was defeated by the English in Sept., 1777, was fought about 13 M. to the N.W.

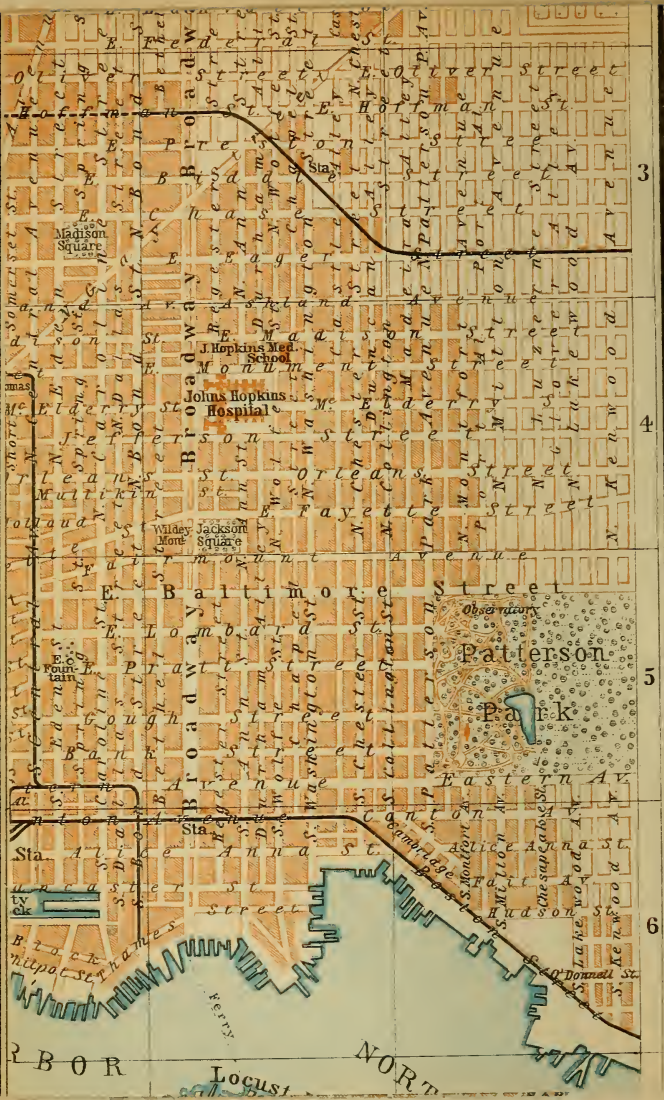
From Wilmington to Cape Charles, 192 M., railway in 5½ hrs. This line, which descends the narrow peninsula to the E. of Chesapeake Bay (p. 208), is of some importance as forming part of a through-route from New York to *Old Point Comfort* (p. 563; 10½-11 hrs.) and as a means of bringing fruit and vegetable supplies to the Northern cities. It runs through the famous peach district of Delaware. One perfectly straight section of this line, 90 M. long, is said to be the longest tangent in the United States. Near (140 M.) *Makemie Park* is the grave of *Francis Makemie* (d. 1708), the founder of organized Presbyterianism in the United States. From (192 M.) *Cape Charles* steamers ply to (24 M.) *Old Point Comfort* (p. 563) and (36 M.) *Norfolk* (p. 561).

Beyond (39 M.) *Newark*, the seat of Delaware College (120 students), the train crosses the famous *Mason & Dixon's Line* (p. 192) and enters *Maryland* (p. 189). Near (51 M.) *North-East* we see Chesapeake Bay (p. 208) to the left. — About 4 M. to the N.W. (railway) of (59 M.) *Perryville* is *Port Deposit* (Falls Ho., $ 2), on the Susquehanna, with the *Jacob Tome Institute*, a large and richly endowed school for boys. — At (61 M.) *Havre-de-Grace*, with its great shad-fishery, we cross the wide *Susquehanna*, which here enters the head of Chesapeake Bay. Farther on we cross several wide shallow rivers or arms of the Bay.

96 M. **Baltimore** *(Union Station)*, see p. 203.



than other cities of the Southern States. During the War of Independence



E. Federal St.
Oliver Street
E. Oliver Street
Hoffman St.
E. Hoffman St.
E. Preston Street
E. Biddle Street
E. Chase Street
E. Eager Street
Madison Square
Broadway
Ashland Avenue
E. Madison Street
J. Hopkins Med. School
E. Monument Street
Johns Hopkins Hospital
Mc Elderry St.
Jefferson Street
Orleans St.
Orleans Street
Mullikin St.
E. Fayette Street
Wildey Mont
Jackson Square
Fairmount Avenue
E. Baltimore Street
Observatory
Patterson Park
E. Lombard St.
E. Pratt Street
E. Fountain
Gough Street
Bank Street
Eastern Av.
Canton Avenue
Sta.
Alice Anna St.
Cambridge
Boston
Fait Av.
Hudson St.
O'Donnell St.
Lakewood Av.
Chesapeake St.
Kenwood Av.
Thames
Ferry
Locust
3
4
5
6

26. Baltimore.

Railway Stations. *Union* or *Charles Street Station* (Pl. C, D, 2, 3), for the Penna. Railroad and its branches, incl. the N. Central and P. B. & W. R. R., and also for the W. Maryland R. R.; *Camden Station* (Pl. C, 5, 6), Camden St., for the B. & O. lines; *Mt. Royal Station* (Pl. C, 3), cor. Mt. Royal Ave. and Cathedral St., also for B. & O. trains (comp. p. 208); *Calvert St. Station* (Pl. D, 4), for trains of the Philadelphia, Baltimore, and Washington, and the N. Central lines; *Hillen St. Station* (Pl. D, 4), for the W. Maryland R. R.; *North Avenue Station* (Pl. C, 2), for the Maryland and Penna. R. R.; *Station of Washington, Baltimore, & Annapolis Electric Railway*, Park Ave., cor. of Liberty St. (Pl. C, 5). — *Cab* to hotel 25 c. for each person.

Hotels. *Belvedere (Pl. m; C, 3), S.E. corner of Charles and Chase Sts., R. from $ 2; *Stafford (Pl. e; C, 4), cor. of Charles and Madison Sts., R. from $ 1½; *Hotel Rennert (Pl. a; C, 4), cor. of Saratoga and Liberty Sts., R. from $ 1½; St. James (Pl. c; C, 4), cor. of Charles and Centre Sts., R. from $ 1; Kernan, Franklin St. (Pl. C, 4), R. from $ 1½; Caswell, cor. of Baltimore and Hanover Sts. (Pl. C, 5), R. from $ 1, these two commercial; Eutaw House (Pl. d; C, 5), Eutaw St., $ 3; Howard, Howard St., near Baltimore St., R. from $ 1½; Sherwood, 210 Monument St., a good family hotel.

Restaurants. At the *Belvedere*, *Stafford*, *St. James*, and *Rennert Hotels*, see above; restaurants at *Union* and *Camden Stations; Woman's Exchange*, cor. Charles and Pleasant Sts. (for ladies); *Crown Luncheon Rooms*, 225 Baltimore St. and 221 W. Lexington St., the latter frequented by ladies; *Kelly's Oyster Saloon*, 9 N. Eutaw St.; *Raleigh*, near City Hall, D. 50 c.; *Childs'* (comp. p. 14), 18 N. Charles St., cor. of Fayette St.; *Dennett's* (p. 14), 308 W. Baltimore St.; *Horn & Horn*, 304 E. Baltimore St.; *Dutch Tea Room*, 314 N. Charles St., much frequented by ladies for tea or luncheon.

Tramways (5 c.) traverse the chief streets and run to various suburbs. The cars of each route are designated by a separate century (0, 100, 200, etc.).

Cabs. Within district bounded by Broadway, North Ave., Pennsylvania Ave., Fremont St., Arlington Ave., Cross St., and the Harbour, each pers. 25 c. By time 75 c. per hr. To *Druid Hill Park*, 1-2 pers. $ 1½, 3-4 pers. $ 2. *Hacks* (with two horses) 50-75 c. for 1 pers., each pers. addit. 25 c., per hr. $ 1½. Night-fares higher.

Theatres. *Academy of Music* (Pl. C, 4; prices $ ¼-1½); *Ford's Grand Opera House* (Pl. C, 5); *Maryland Theatre* (vaudeville), Franklin St., near Eutaw St. (Pl. C, 4); *Auditorium*, adjoining the Academy of Music (see above); *Holliday Street Theatre* (Pl. D, 5); *Albaugh's Lyceum* (Pl. C, 3); *Lyric* (Pl. C, 3), opposite Mt. Royal Station, for concerts and public meetings.

Post Office (Pl. D, 5), Battle Monument Sq.

Consuls. British, *Mr. Gilbert Fraser*, 418 Courtland St.; German, *Mr. K. A. Lüderitz*.

Baltimore (the '*Monumental City*'), the chief city of Maryland and one of the great seaports of America, is finely situated on the broad estuary of *Patapsco River*, 14 M. from *Chesapeake Bay* (p. 208) and 204 M. from the Atlantic Ocean. The city, which is well laid out and built mainly of a cheerful red brick, is divided into two sections by a stream named *Jones's Falls*, toward which the ground slopes rapidly on either side. In 1900 Baltimore contained 508,957 inhabitants. The Roman Catholic Archbishop of Baltimore (Card. Gibbons) is Primate in the United States.

Baltimore was first laid out as a town in 1729, and received its name from the title of the Barons of Baltimore (Co. Longford, Ireland), founders and proprietaries of the Maryland Colony. In 1780 it had grown sufficiently in importance to be made a port of entry, and it was incorporated as a city in 1796. After the conclusion of the war of 1861-65 its population rapidly increased, and of late years several populous suburbs have been included in its limits. Baltimore has been in one respect more fortunate than other cities of the Southern States. During the War of Independence

it was threatened, but not attacked; in the war with Great Britain in 1814 it successfully resisted a combined attack by water and land; and in the Civil War it lay outside the area of actual combat. Its history is, therefore, an almost unbroken chronicle of peace and prosperity. In 1904 the business section of the city was visited by a conflagration which swept over an area of 150 acres and destroyed property to the value of $ 70,000,000. No lives were lost. The burned district has been rebuilt in an improved manner. — Dr. O. W. Holmes has remarked that three short American poems, each the best of its kind, were all written at Baltimore: *viz.* Poe's 'Raven', Randall's 'Maryland, my Maryland', and Key's 'Star-Spangled Banner' (comp. p. 165). The last was written in 1814, while its author was a prisoner on one of the British ships bombarding Fort McHenry (p. 208). Jerome Bonaparte, brother of Napoleon I., married a Miss Patterson of Baltimore, and their descendants still live in the city.

The total value of the manufactures of Baltimore in 1900 was $ 161,250,000 (32,250,000*l.*), in the production of which 79,000 hands were engaged. It is the chief seat of the canning industry of the United States, the materials being the famous oysters of Chesapeake Bay and fruits from its shores. The annual product is 50,000,000 cans, and about 15,000 hands are employed in this industry. Iron, steel, and copper are produced; and the Bessemer Steel Works at *Sparrow's Point* (9 M. from Baltimore) have a daily capacity of 2000 tons. The cotton-duck mills in and near Baltimore run 150,000 spindles, employ about 6000 hands, and produce three-fourths of the sail-duck made in the United States. In brick-making Baltimore ranks fourth among American cities, producing annually 150,000,000. Next to New York it is the largest grain-market on the Atlantic coast, its annual receipts being 50-70 million bushels. The value of the exports of Baltimore in 1907 was $ 90,410,342. Its harbour is annually entered and cleared by ca. 1500 sea-going vessels of ca. 3,000,000 tons' burden (besides coasters).

The water-supply of Baltimore is furnished by the Gunpowder River and Jones's Falls, and is stored in 8 reservoirs with an aggregate capacity of 2275 million gallons, capable of a daily supply of 300 million gallons, the daily consumption being 175 millions. The water from Gunpowder River is brought through a tunnel almost 7 M. long. — The extensive new sewage-system of Baltimore is also interesting to experts.

Before the days of railway-transportation Baltimore was the principal centre for the trade with the West, the produce from which was carried in huge 'Conestoga' wagons across the mountains and over the national turnpike to this city.

The natural centre for the visitor to Baltimore is ***Mt. Vernon Place** (Pl. C, 4), a small square, prettily laid out and suggesting Paris in its tasteful monuments and surrounding buildings. In the middle rises the **Washington Monument** (Pl. C, 4), a column 130 ft. high, resting on a base 35 ft. in height and surmounted by a colossal statue of George Washington. The *View from the top (open from 9 a.m. till 5 p.m.; adm. 15 c.) forms the best introduction to the city.

The monument stands at the intersection of Charles St. (p. 206), running N. and S., and Monument St., running E. and W. To the S. lies the harbour. The dark-grey building to the E., just beyond the railway, is the *Jail* (Pl. D, 4), immediately to the N. of which is the new *State Penitentiary*. Johns Hopkins Hospital (p. 207) is conspicuous to the E.

The other monuments in the square include *Bronzes of Peace, War, Force, Order, and a Lion, by *Barye* (p. 205); a statue of Chief Justice Taney, by *Rinehart* (p. 205; replica of that at Annapolis, p. 209); a statue of Peabody (see p. 205), by *Story* (a replica of the one in London); a spirited equestrian statue of John Eager Howard (1752-1827), the hero of the Cowpens (p. 571), by *Frémiet;* a statue of S. T. Wallis (1816-1894), a noted Baltimore lawyer, by *Marqueste;* and a figure of Military Courage, by *Dubois.*

At the N.E. corner of the square is the handsome *Mt. Vernon Methodist Episcopal Church* (Pl. C, 4). At the S.E. corner of the

square stands the **Peabody Institute** (Pl. C, 4), founded and endowed by Mr. George Peabody (p. 282), for the encouragement of science, art, and general knowledge.

The *Reference Library* (9-10.30), on the groundfloor, contains 150,000 well-selected vols.; the *Reading Room* is large and handsome.

The **Art Gallery** (9-4), on the first floor, contains collections of casts, American paintings, etc. The **Rinehart Collection* consists of casts (Nos. 116-139, 163-167, 168-182) of the works of *William H. Rinehart* (1825-74), a native of Maryland. No. 106 (Clytie) is an original.

The institution also includes a *Conservatorium of Music.*

Also on the S. side of the square (No. 5) is the house of *Mr. Henry Walters*, connected by an overhead bridge with a new picture-gallery (entrance on W. side), containing the celebrated **Walters Collection**, one of the finest private collections of art in America (open to the public, 11-4, on Wed. in Feb., March, and April, on Sat. also in April; tickets 50 c., sold for the benefit of the poor, at the Stafford, Belvedere, and Rennert Hotels, Albaugh's Ticket Office, Charles St., etc.; also at 1113 Pennsylvania Ave., Washington). The new building, 130 ft. long by 120 ft. wide, is intended as a memorial to Mr. W. T. Walters (1820-94), a bronze bust of whom surmounts the entrance.

Ground Floor. Four rooms are fitted up in the Louis XIV., Louis XVI., French Renaissance, and French Gothic styles, and contain objects of these different periods. Another room, with a Renaissance ceiling from a palace near Milan, contains carved woodwork, Limoges enamels, and other art objects of the 16th century. In a sixth room are bronzes, terracotta vases, and other Greek and Roman objects. The Barye Room contains water-colours, drawings, and the most extensive existing collection of *Bronzes and Drawings by *A. L. Barye.* The water-colours and drawings include four by Millet (one the original design for the Angelus), and others by Rosa Bonheur, Detaille, Felix Ziem, Meissonier, O. Achenbach, Fred. Walker, Alex. Bida, and Alma Tadema.

The centre of the groundfloor is occupied by a Covered Court, containing Greek, Roman, Renaissance, and modern sculpture. In its gallery is a magnificent *Collection of Chinese and Japanese bronzes, enamels, porcelain, ivory-carvings, paintings, tapestry, etc.

On the First Floor are five rooms containing the **Collection of Paintings**, including 280 modern works, chiefly of the French School, and older works, illustrating the development of art from the 12th cent. onward. The most important work in the gallery is *Raphael's* *Madonna del Candelabro, and there are also good examples of masters of most of the Italian, French, German, Dutch, and English schools. Among the most noted of the modern works, which are of singularly uniform excellence, are *Corot's* Martyrdom of St. Sebastian (a large canvas 8 ft. by 4 ft.); *Millet's* Sheepfold and Potato Harvest; *Meissonier's* '1814' (Napoleon on the retreat from Moscow); *Rousseau's* Le Givre (winter solitude); *Gérôme's* The duel after the masquerade; *Delaroche's* 'Hémicycle du Palais des Beaux-Arts', a reduced replica, by the master's own brush, of the mural painting in the Palais des Beaux-Arts at Paris, with figures of great artists and allegorical figures of art, etc.; *Fortuny's* Hindoo snake-charmers; *Troyon's* Cattle drinking; and good examples of *Gleyre, Alma Tadema, Briton Rivière, Gilbert Stuart, Leys, Delacroix, E. van Marcke, J. J. Henner, Horace Vernet, A. de Neuville, Jules Dupré, Jules Breton,* and *Turner.* Scattered throughout the rooms are cases containing Japanese lacquers, Sèvres and Dresden porcelain, miniatures, vories, and other small articles.

Below the groundfloor is a Crypt containing the Shrewsbury Collection of Instruments of Torture, including the original 'Iron Virgin' (a hollow figure with iron spikes in the interior, into which the victim was thrust) from Nuremberg.

Charles Street (Pl. C, 1-8), one of the chief thoroughfares of the city, leads to the N. from the Washington Monument past the *Union Station* (Pl. C, D, 2, 3; p. 202), near which, at the N. end of the B. & O. tunnel (p. 208), is the *Mt. Royal Station* (p. 203). Following Charles St. to the S., we pass (right) the *First Unitarian Church* (Pl. C, 4) and the back of the **Roman Catholic Cathedral** (Pl. C, 4), which faces Cathedral St. It is surmounted by a dome, 125 ft. high, and contains some interesting paintings. Adjacent is the residence of the Archbishop (p. 203).

In W. Mulberry St., a little to the W. of the Cathedral, is the **Enoch Pratt Free Library** (Pl. C. 4), a white marble building, with 170,000 books (90,000 more in its 12 branches). — At the N.E. corner of Franklin and Cathedral Sts. is the new building of the *Young Men's Christian Association* (Pl. C, 4). — At the corner of Cathedral and Mulberry Sts. is the *Calvert Hall College* (Pl. C, 4).

At the corner of Charles St. and Saratoga St., to the right, are the *Metropolitan Savings Bank* (Pl. C, 4, 5) and the *Colonial Trust Co.* (right). Opposite is the *New Mercantile Library* (40,000 vols.). At the S.E. corner is *St Paul's Church* (P. E.; Pl. C, 4), the old parish church of the city (1692).

In E. Saratoga St. stands the **Athenæum** (Pl. D, 4), with the *Maryland Historical Society* (10-4), containing a library and some interesting portraits and relics, *e.g.* the Calvert family papers.

In W. Fayette St., in the graveyard of the *Westminster Presbyterian Church* (Pl. C, 5), is the tomb of *Edgar Allan Poe* (1809-49), with a small monument. [He died in the *Church Home*, cor. of Broadway & Fayette St., Pl. F 4.] Near this point, at the corner of Lombard and Greene Sts., is the **University of Maryland** (Pl. C, 5).

The **Lexington Market* (Pl. C, 5), a little to the N. of this point, should be visited for its picturesque illustrations of Southern produce and manners (best on Tues. & Frid. mornings and Sat. night). — The new *Centre Market* (Pl. D, 5) to the W. of Jones's Falls, is larger but not yet so interesting.

Farther on Charles St. passes the *Masonic Temple* (Pl. C, 4, 5; left), intersects Baltimore Street (Pl. A-G, 5), the chief business street of the city, and is continued to South Baltimore.

In the meantime, however, we may follow E. Fayette St. to the left to the **Court House** (Pl. D, 5), a handsome white marble building, and the **Post Office** (Pl. D, 5), in front of which rises the *Battle Monument*, erected in 1815 in memory of the struggles of the previous year. The interior of the Court House is adorned with admirable mural paintings by *Blashfield*, *C. Y. Turner*, and *La Farge*. To the E. of the Post Office is the **City Hall** (Pl. D, 5), a large and handsome building, with a dome 260 ft. high (view; open, 9-3).

These three important buildings just escaped the fire of 1904, which destroyed the part of the city immediately to the S. of them (see p. 204).

A little farther along E. Fayette St., just beyond the stream, is the *Merchants' Shot Tower* (Pl. D, 5), a curious relic of 1828, 246 ft. high.

To the S. of the City Hall, in Gay St., between Water and Lombard Sts., is the imposing new **Custom House** (Pl. D, 5), which was damaged by the fire of 1904 (see p. 204) but has since been repaired and completed. It was designed by *Hornblower & Marshall* and is decorated with marine paintings by *F. D. Millet.*

A little to the W. of Mt. Vernon Place, between Howard St. and Eutaw St., are the unpretentious buildings of the philosophical department of ***Johns Hopkins University** (Pl. C, 4; *President Remsen*).

This institution was founded in 1876 with a legacy of 3½ million dollars (700,000 *l.*), bequeathed by *Johns Hopkins* (d. 1873), a Baltimore merchant, and offers special advantages for post-graduate and for medical work. It is now attended by 650 students, three-fourths of whom are graduates of other colleges and universities. Its success and influence, however, cannot be measured by the number of its students; and its system of instruction, publications, etc., have been of the greatest importance in stimulating the higher learning and original research. Its laboratories and other institutions are well equipped, and its library contains 135,000 volumes. On the ground-floor of McCoy Hall are good portraits of the presidents and professors.

The ***Johns Hopkins Hospital** (Pl. F, 4; tramway viâ Centre St.), opened in 1889, is also due to the liberality of Mr. Hopkins, who bequeathed over $ 3,000,000 (600,000 *l.*) for its foundation.

Both as a scientific and charitable institution, this hospital is an important adjunct to the University; and in the completeness of its equipments and excellence of its system, it ranks with the foremost hospitals in the world. The buildings of the *Medical School* of Johns Hopkins University adjoin the hospital.

Among the numerous other **Charitable Institutions** of Baltimore, many of which are of great interest, are the *Bay View Asylum* or *City Alms House*, for paupers; the *State School for the Blind* (Pl. D, 2); the *Children's Aid Society*; the *City Hospital* (Pl. D, 4); *St. Joseph's Hospital* and other noble charities of the R. C. church; and the *Wilson Sanitarium*, 12 M. from Baltimore (p. 209), for affording change of air to sick children and their mothers in summer.

The *Wells and McComas Monument* (Pl. E, 4), passed on the way to the Johns Hopkins Hospital, is to the memory of two youths who killed the British commander, Gen. Ross, at the battle of North Point (Sept. 12th, 1814), and were themselves killed immediately afterwards.

Persons interested in the higher education of women should not omit to visit the **Woman's College** (Pl. D, 1, 2; ca. 350 students), St. Paul St., and the **Bryn Mawr School** (Pl. C, 3; built by *H. R. Marshall*), Cathedral St., two admirable and well-equipped institutions. — The *First Presbyterian Church* (Pl. C, 4), Park Ave., is a good specimen of Dec. Gothic, with a spire 250 ft. high. — The *Synagogues* of the Baltimore Hebrew Congregation, at the corner of Robert St. and Madison Ave. (Pl. B, 2), and of the Oheb Shalom Congregation, at the corner of Eutaw Pl. and Lanvale St. (Pl. B, 3), are two imposing structures. To the S.W. of the Bryn Mawr School, at the corner of Bolton and Hoffman Sts., is the *Fifth Regiment Armoury* (Pl. C, 3). A little to the N. of this point, in Mt. Royal Avenue, is the **Maryland Institute School of Art and Sciences* (Pl. C, 2), for both sexes, by Pell & Corbett, adjoined by the *Jenkins Memorial Church* (R.C.).

Baltimore prides itself with justice on ***Druid Hill Park** (Pl. A, B, 1), a pleasure-ground of about 700 acres, which owes its beauty in great part to the fact that it had been preserved as a private park for 100 years before passing into the hands of the city. Its hills afford beautiful views. *Druid Lake*, ½ M. long, is one of the reservoirs of the city waterworks (p. 204). The old *Mansion House* contains a restaurant, and there is a small zoological collection near by.

Washington, Columbus, and Wallace (replica of the statue at Stirling) are commemorated by monuments in Druid Hill Park. At the *Mt. Royal Entrance* (Pl. B, 1) is a Soldiers Monument by Weinman (1908). The *Main Entrance* (Pl. A, 1) may be reached by tramway viâ Madison Ave. or Druid Hill Ave. Those who drive should choose the route through *Eutaw Place (Pl. A, B, 2, 3).

Clifton Park (Pl. G, 1), in the N.E. part of the city, contains the old mansion of Johns Hopkins (p. 207). — Patterson Park (Pl. G, 5), the 'lung' of the E. quarters of the city, contains earthworks thrown up to defend the city against the British in 1814 (p. 203). — *Greenmount Cemetery* (Pl. D, E, 2, 3) contains the graves of Mme. Patterson Bonaparte (d. 1879; see p. 204), Junius Brutus Booth (d. 1852), the actor (father of Edwin Booth), Johns Hopkins, etc. — The best view of the water-front is obtained from *Federal Hill Square* (Pl. D, 6), in S. Baltimore.

The **Harbour**, 3 M. long and $1/2$-$3/4$ M. wide, consists of an outer bay accessible to the largest vessels and an inner basin for vessels of lighter draught. Its entrance is commanded by **Fort McHenry** (Pl. G, 8; electric tramway), which offers little beyond its historical interest (see p. 204). — The new *Municipal Docks* (Pl. D, E, 5, 6) repay a visit.

The elaborate system of **Tunnels** by which the railways traverse Baltimore deserves the attention of the engineer. The Pennsylvania R. R. crosses the city from E. to W. by the *Union Tunnel* (2/3 M.) and the *Baltimore & Potomac Tunnel* (1 3/8 M.), with an open stretch of 3/4 M. (containing the Union Station) between them. The *Baltimore & Ohio Tunnel* runs from N. to S. (1 1/2 M.), and the trains passing through it are worked by electricity.

Excursions from Baltimore.

Chesapeake Bay is the largest inlet on the Atlantic coast, with a length of 200 M. and a breadth of 10-20 M. It receives the waters of the Susquehanna, Potomac, James, and other rivers, and is navigable for the largest vessels. The bay is a favourite resort of sportsmen, and its game (canvas-back ducks, etc.), fish, terrapins, and oysters have a wide reputation. Steamers run regularly to different points in the Bay (see daily papers), and the visitor is recommended to make a day-trip on one of these, the numerous inlets into which they penetrate with the mails imparting constant variety to the scenery. At the head of one of these inlets, on the *Chester*, lies *Chestertown*, the seat of Washington College (1782; 150 students). On *Kent Island* Captain William Clayborne made the first European settlement in Maryland, in 1631. *Tolchester Beach* (25 M.) is on the E. shore. *Annapolis* (p. 209), *Old Point Comfort* (p. 563) and *Norfolk* (p. 561; 12-13 hrs.), etc., may be reached by steamer on Chesapeake Bay. Steamer to *Washington*, see p. 210.

Lake Roland (225 ft.), 8 M. to the N. (N. Cen. R. R.), one of the chief reservoirs of the Baltimore Waterworks, and *Loch Raven*, on the *Gunpowder River*, another source of the water-supply, are frequently visited.

About 5 M. from *Ellicott City* (15 M. to the W. of Baltimore) is *Doughoregan Manor*, the country-seat of Charles Carroll of Carrollton (1737-1832), one of the signers of the Declaration of Independence.

Among other favourite resorts of the Baltimoreans are those in the *Blue Ridge Mts.* (p. 209); and excursions may also easily be made to *Gettysburg* (p. 192), *Harper's Ferry* (p. 351), *Washington* (p. 211), the *Shenandoah Valley* (p. 597), etc.

From Baltimore to Cumberland, 167 M., *Western Maryland R.R.* (Hillen St. or Union Station) in 5½-6½ hrs. (return-fare to Blue Mt. House or Gettysburg $ 3.60; observation car). This line leads to the N.W. to several favourite resorts in the *Blue Ridge Mts.* and to *Gettysburg*. — 8 M. *Mt. Hope*, with a large Insane Asylum; 12 M. *Mt. Wilson* (see p. 207); 20 M. *Glyndon*, for (51 M.) *Gettysburg* (p. 192); 34 M. *Westminster* (700 ft.), the seat of Western Maryland College (250 students); 49 M. *Bruceville* (415 ft.), for (17 M.) *Frederick* (p. 350). 69 M. *Blue Ridge* (1375 ft.), where we cross the summit of the Blue Ridge Mts., is the station for *Monterey Springs* (Hotel, $ 2½). 70½ M. *Buena Vista*, connected by tramway with (2 M.) *Buena Vista Spring Hotel*. — 71 M. Pen-Mar (1200 ft.; *Pen-Mar Ho., Washington Cliff Ho., Mt. Royal Inn*, $ 2), named from its situation on the boundary between Pen(nsylvania) and Mar(yland), is one of the most popular resorts in the Blue Ridge Mts. A fine view of the *Cumberland* and *Shenandoah Valleys* (pp. 189, 597) is obtained from (2 M.) *High Rock* (2000 ft.) and from *Mt. Quirauk* (2500 ft.). — 72 M. *Blue Mountain House* ($ 3-4), a large and excellent hotel, offers the most comfortable quarters in the neighbourhood. — 75 M. *Edgemont* is the junction of the Cumberland Valley branch to *Chambersburg* (p. 193). 87 M. *Hagerstown* (p. 189); 93 M. *Williamsport* (p. 185). — 105 M. *Big Pool* is the junction of a short branch-line to *Cherry Run* (p. 351). — Beyond (116 M.) *Hancock* we thread the *Indigo Tunnel*, ca. 1 M. long. We cross the *Potomac* twice. — 151 M. *Oldtown*. At (167 M.) *Cumberland* we join the B. & O. R. R. (see p. 351).

From Baltimore to Harrisburg, 85 M., *Northern Central R. R.* in 2½-3⅓ hrs. — 85 M. *Harrisburg*, see p. 189.

From Baltimore to Annapolis, 26 M., *Maryland Electric Railway* (*'Short Line'*) in ¾-1 hr. (fare 60 c., return-fare $ 1). The line skirts *Chesapeake Bay* (left), crossing the *Severn River*. The intermediate stations are unimportant. — Annapolis may also be reached by the B. & O. R. R. (38 M.; 1-1¼ hr.), viâ Annapolis Junction; by the Pa. R. R. (33 M.) viâ Odenton; or by the new Washington, Baltimore, & Annapolis Electric Railway, viâ *Academy Junction*.

26 M. **Annapolis** (*Carvel Hall*, from $ 3; *The Maryland*, $ 2½; board, even for one night, at *Miss Buchanan's*, Maryland Ave., cor. Hanover St., $ 2, at Mrs. Bolling's, Hanover St., and at Mrs. Cheston's, Prince George St.), the quaint and quiet little capital of Maryland (8525 inhab.), is the oldest chartered city in the United States (charter from Queen Anne in 1708). It is pleasantly situated at the influx of the *Severn* into Chesapeake Bay and carries on a considerable trade in oysters. Near the centre of the town stands the *State House* (°View from the upper windows). The Senate Room (to the right on entering) was the scene of Washington's surrender of his commission in 1783 and of the First Constitutional Convention in 1786. In front of the State House is a colossal *Statue of Chief Justice Taney* (1777-1864), by Rinehart (p. 205). To the left is a *Statue of Gen. De Kalb* (1721-80), by Keyser. The new *State Library* contains 40,000 volumes. *St. John's College*, chartered in 1784, represents a foundation of 1696 (200 students). In its grounds is the *Tree of Liberty* (700 years old; girth 30 ft.) under which a treaty is said to have been made by the early settlers with the Indians. Some of the old Colonial houses and churches are interesting (comp. p. lxxxviii), such as the so-called *Richard Carvel House* (from Winston Churchill's novel; now a school of the Sisters of Notre Dame), the *Brice House* (Georgian), and the vine-covered *Church of St. Anne*, opposite the *Post Office*. The chief lion of Annapolis is, however, the °United States Naval Academy, founded in 1845 for the education of officers for the navy. The cadets (ca. 850) are nominated in the same way as the West Point cadets (comp. p. 89). The course of instruction comprises four years at the Academy and two at sea. Among the chief buildings, recently erected by E. Flagg, are the *Cadet Quarters* (a huge granite building), with a fine memorial hall, etc.; the *Library;* the domed *Chapel*, with a crypt containing the remains of John Paul Jones (1747-92); the *Gymnasium*, with its swimming pool; the *Laboratories*; and the *Engineering Shops*. The military exercises take place after 4 p.m., when the 'recitations' (classes) end. — About 5 M. to the N. of Annapolis is *Whitehall*, the fine Colonial mansion of Col. Horatio Sharp, Governor of Maryland in 1753-69.

27. From Baltimore to Washington.

Comp. Map, p. 156.

a. Viâ Philadelphia, Baltimore, & Washington Railroad.

43 M. Railway in 1-1¾ hr. ($1.20; parlor-car 25 c.). This forms part of the Pennsylvania line from New York to Washington (228 M.; express in 5-6 hrs., $6.50; sleeper $2, parlor-car $1.25).

The trains start from the *Calvert* and *Union Stations* (see p. 203) and pass below the N.W. quarters of the city by a tunnel 1⅓ M. long. 19 M. *Odenton* is the junction of the Washington, Baltimore, & Annapolis Electric Railway to (14 M.) *Annapolis* (p. 209). 40½ M. *Navy Yard* (p. 226). In approaching Washington we thread a tunnel 300 yds. long. Fine view of the Capitol to the right.

43 M. *Washington*, see p. 211.

b. Viâ Baltimore & Ohio Railroad ('Royal Blue Line').

40 M. Railway in ¾-1¾ hr. (fares as above). Express from New York in 5-5½ hrs. (fares as above).

Baltimore, see p. 203. At (9 M.) *Relay Station* the train crosses the *Thomas Viaduct*, the oldest railway-bridge of stone in America, over the *Patapsco River*. From (18 M.) *Annapolis Junction* the above-named electric line runs to (20 M.) *Annapolis* (p. 209). 21 M. *Laurel;* 34 M. *Hyattsville.*

40 M. *Washington*, see p. 211.

c. Viâ Washington, Baltimore, & Annapolis Electric Railway.

38 M. Railway in 1¼ hr. (fare 75 c.).

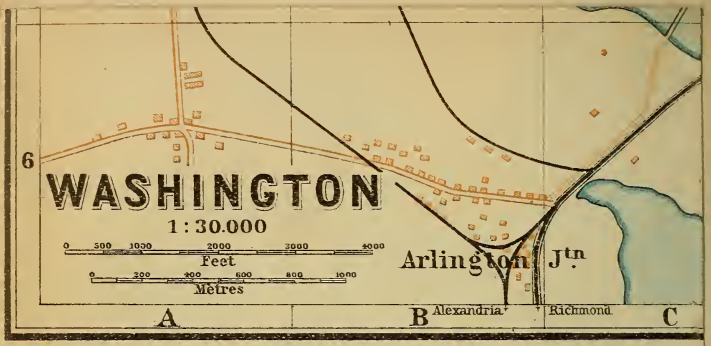
Baltimore, see p. 203. From (18 M.) *Naval Academy Junction* branch-lines run to the S. to (13 M.) *Annapolis* (p. 209) and to the N. to (1 M.) *Odenton* and (7 M.) *Annapolis Junction* (see above).

40 M. *Washington*, see p. 211 (station at 15th and H Sts. N.E., Pl. H, 3).

d. By Water.

Steamers of the *Maryland, Delaware, and Virginia Railway* leave Pier 9, Light St., Baltimore, 3-5 times weekly at 5 p.m., and reach Washington (7th St. Wharf) in ca. 36 hrs. (fare $2; stateroom $1½-2½; meals 50 c. each).

The steamers ply down *Chesapeake Bay* (p. 208) and up the *Potomac* (p. 212), calling at many small stations. Among the places passed after rounding *Point Lookout* (right) and entering the river are *St. Mary's City* (r.), the landing-place of Leonard Calvert, first Governor of Maryland, in 1634, and the first capital of the province; *Wakefield* (left), the birthplace of George Washington (1732-99), with a monument erected in 1897; *Mathias Point* (l.), heavily fortified by the Confederates in the Civil War; *Indian Head*, with Government proving ground for heavy ordnance; *Mt. Vernon* (p. 228); and *Alexandria* (p. 228). The trip is, perhaps, better made in the reverse direction, when these points of historic interest are passed by daylight. — *Washington*, see p. 211.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Naval Observatory
Observatory Circle
W Street
Wisconsin
Cemetery
U Street
T Street
Rock Creek
Connecticut Ave. Ext.
Calvert Street
Waterside Drive
Belmont Road
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Tracy Pl.
California St.
California St.
McClellan
Beaver Pl.
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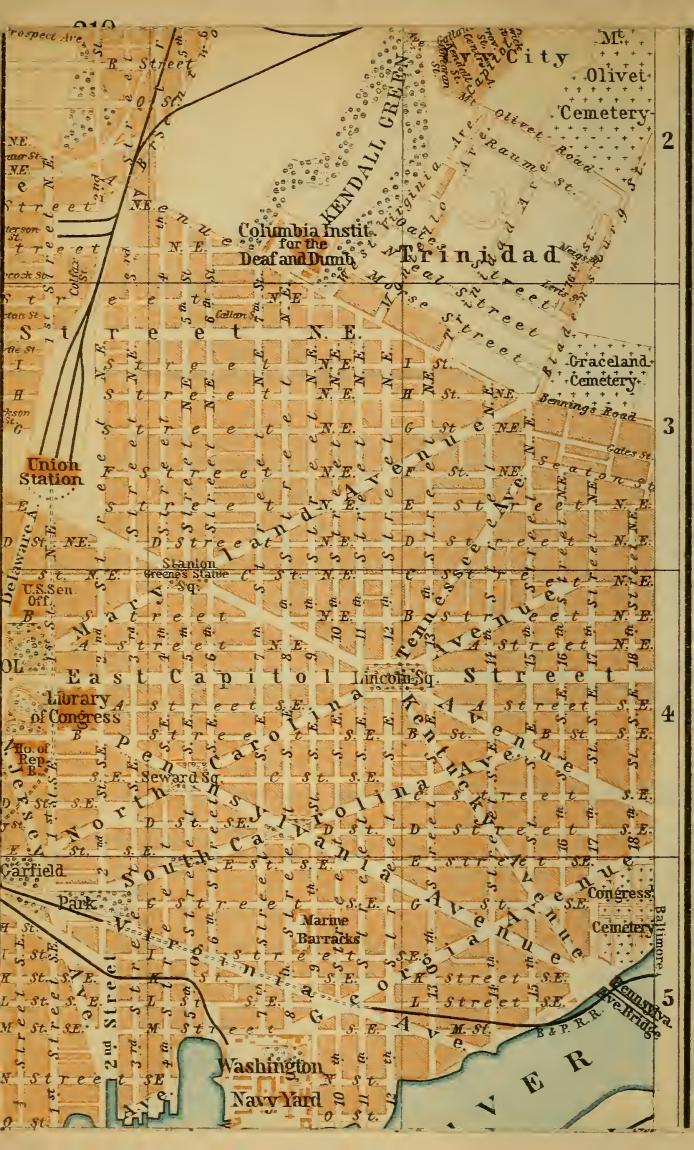


Mt. Olivet Cemetery
Mt. Olivet Road
KENDALL GREEN
Columbia Instit. for the Deaf and Dumb
Trinidad
Graceland Cemetery
Bennings Road
Union Station
Stanton Greenes Statue Sq.
U.S. Sen. Off.
Delaware A.
East Capitol Street
Lincoln Sq.
Library of Congress
Ho. of Rep. B.
Seward Sq.
Garfield Park
Marine Barracks
Congress Cemetery
Washington Navy Yard
Pennsylvania Ave. Bridge
B & P. R.R.
Baltimore
2
3
4
5

28. Washington.

Union Railway Station (Pl. F, 3; p. 213; restaurant), Massachusetts Ave., not far from the Capitol, for all trains. — *Hotel Omnibuses* meet the chief trains (25 c.). *Cab* into the town, each pers. 25-35 c. (see below).

Hotels (many of them closed in summer). *New Willard (Pl. e; D, 3), cor. of Pennsylvania Ave. and 14th St., with palm-garden restaurant, R. from $ 2½; Arlington (Pl. a; D, 3), Vermont Ave., from $ 5, R. from $ 2; *Shoreham (Pl. b; D, 3), 15th St., from $ 5, R. from $ 2; Gordon (Pl. c; C, 3), 916 16th St., $ 3-5, R. from $ 1½; Normandie (Pl. d; D, 3), McPherson Sq., from $ 4, R. $ 1-3; Cochran (Pl. s; D, 3), 14th and K Sts., from $ 4; Raleigh (Pl. r; D, 3), cor. Pennsylvania Ave. and 12th St., R. from $ 1½, commercial; Cairo (Pl. p; C, 2), Q St., between 16th and 17th Sts., $ 3½; Ebbitt Ho. (Pl. f; D, 3), cor. of F and 14th Sts., from $ 4; Riggs Ho. (Pl. g; D, 3), cor. G and 15th Sts., $ 3-5; Metropolitan (Pl. i; E, 4), 613 Pennsylvania Ave., $ 2½-4, these three old-established houses on the American plan, much frequented by politicians; *Grafton (Pl. q; C, 2), Connecticut Ave., between L & M Sts., from $ 3, quiet and comfortable; Regent (Pl. m; D, 3), cor. Pennsylvania Ave. and 15th St., $ 3, R. from $ 1; Driscoll (Pl. l; F, 4), B St., cor. of 1st St., from $ 3, R. from $ 1½; National (Pl. n; E, 4), Pennsylvania Ave., $ 2½-4, R. from $ 1; Bancroft (Pl. t; C, 3), 18th and H Sts., $ 2½-3½; Dewey (Pl. v; D, 3), L St., from $ 3½; Richmond (Pl. u; C, 3), 17th and H Sts., $ 4, R. from $ 1½; Hamilton, cor. of 14th and K St. (Pl. D, 3), from $ 1½; St. James (Pl. o; E, 4), R. from $ 1; La Fetra's Temperance Hotel (Pl. x; D, 3), cor. of G and 11th Sts., unpretending, $ 2, R. from $ 1; Dolly Madison House, 1401 Massachusetts Ave., for ladies only, well spoken of, from $ 2. Also numerous small *Family Hotels* and *Boarding Houses* ($ 10-20 a week).

Restaurants. At the **Willard*, **Arlington*, *Shoreham*, *Raleigh*, and other hotels on the European plan (see above); *Harvey*, 1016 Pennsylvania Ave. (steamed oysters, etc.); *Losekam*, 1325 F St.; *Hancock*, 1234 Pennsylvania Ave., a quaint little place (men only), with a collection of relics; *Capitol Restaurants*, see pp. 215, 216; *Fussell*, 1425 New York Ave. (ice-cream, etc.); *La Fetra's Luncheon Rooms*, see above (frequented by ladies); *Ratskeller*, cor. of 8th and E Sts (Pl. E, 3); *Railway Restaurant*, see above. Munich beer at *Fritz Reuter's Ratskeller*, cor. Pennsylvania Ave. and 2nd St., frequented by Germans.

Tramways (mostly on the 'underground trolley' system) and **Omnibuses** (*'Herdics'*) traverse many of the principal streets.

Cabs (*Hacks* and *Hansoms*). For 15 squares each pers. 25 c., each addit. 5 squares 10 c., at night (12.30-5 a.m.) 40 and 15 c.; per hr., 1-2 pers., 75 c., each addit. ¼ hr. 20 c., 3-4 pers. $ 1 and 25 c., at night $ 1, 25 c., $ 1¼, 35 c. Two-horse Hacks, 1-4 pers., per hr. $ 1½, each addit. ¼ hr. 25 c. To *Arlington* $ 5, *Soldiers' Home* $ 5, *Great Falls of the Potomac* $ 20. — *Taxicabs* with fares as at New York (p. 18).

Steamers ply daily from 7th St. Wharf (Pl. E, 5) to *Norfolk* (p. 561), *Old Point Comfort* (p. 563), *Mt. Vernon* (p. 228), and other river-landings; also, at irregular intervals (see daily papers), to *Baltimore* (p. 203), *Philadelphia* (p. 153), *New York* (p. 10), *Boston* (p. 253), etc. *Steam Ferry* hourly from 7th St. Wharf to *Alexandria* (p. 228; fare 10, return-fare 15 c.). This is a pleasant trip.

Theatres. *New National Theatre* (Pl. D, 3), E St.; *Columbia* (Pl. D, 3), F St.; *Belasco Theatre* (Pl. D, 3), Lafayette Sq.; *Academy of Music* (Pl. E, 3), cor. of D and 9th Sts.; *Chase's Theatre* (*Grand Opera House;* Pl. D, 3), for 'polite vaudeville'. — In summer the *U. S. Marine Band* (Conductor, J. P. Sousa) plays on three afternoons each week at the Capitol, White House, and Marine Barracks (p. 226), while in winter it gives a weekly concert in the hall of the Barracks (Mon. afternoon).

The Seeing Washington Automobiles give a good general idea of the city in the course of a round trip of 1½ hr., passing most of the buildings of interest mentioned in the text. The cars leave the waiting-room at 1417 G St., opposite the Treasury Department (p. 222), daily, including Sun., at 10 a.m., 2 p.m., and 4 p.m. (fare $ 1). Other cars, leaving at 10 and 2, visit the chief Government Buildings, the interiors of which are shown and explained by the guide (fare $ 1½).

Art Collections. *Corcoran Gallery*, see p. 223; paintings at *National Museum*, see p. 219; engravings and prints at the *Library of Congress*, see p. 217. A visit should also be made to the art-store of *Victor Fisher*, 15th St. (close to Pennsylvania Ave.; old and modern pictures).

Clubs. *Metropolitan* (Pl. C, 3); *Army & Navy*, 1622 I St.; *Cosmos* (scientific; Pl. D, 3); *University; Gridiron Club; Washington*, for ladies, 1710 I St.

Post Office (Pl. D, 3), Pennsylvania Ave., between 11th and 12th Sts.

Booksellers. *Brentano*, cor. of 12th and F Sts.; *Woodward & Lothrop*, 11th and F Sts.; *Lowdermilk & Co.*, 1424 F St.

British Embassy (Pl. C, 2), Connecticut Ave.; *Hon. James Bryce*, Ambassador. — **German Embassy**, 1435 Massachusetts Ave.; *Count Bernstorff*, Ambassador. Ger. Con. Agent, *Mr. G. Dittmar.*

Note. Visitors will find all the official addresses and much miscellaneous information of a useful nature in the *Congressional Directory* (35 c.). — All addresses given in the text are presumed to be in the N.W. quarter of the city unless otherwise stated.

The *City of Washington*, the capital of the United States, lies on the left bank of the *Potomac*, at the confluence of the main stream with the E. branch, the *Anacostia*, 156 M. from Chesapeake Bay and 185 M. from the Atlantic Ocean. It covers an area of about 10 sq. M., and in 1900 had 218,196 inhab. (with *Georgetown*, 232,745). The city is in many respects one of the most beautiful in the United States, being finely laid out, with wide asphalted streets, opening up vistas of handsome public buildings, monuments, or leafy squares, with the Capitol and the Washington Monument dominating the entire view. Its plan may be described as that of a wheel laid on a gridiron, the rectangular arrangement of the streets having superimposed upon it a system of radiating avenues, lined with trees and named for the different states of the Union. The streets running N. and S. are numbered, those running E. and W. are named by the letters of the alphabet. The *Circles* formed by the intersection of the streets and avenues are one of the most charming features of the city. *Pennsylvania Avenue*, between the Capitol and the White House (a distance of $1^1/_3$ M.), is the chief thoroughfare, and other important business-streets are *7th St.*, *14th St.*, *9th St.*, and *F St.* Among the finest residence-streets are **New Hampshire Avenue*, **Massachusetts Ave.*, *Vermont Ave.*, *Connecticut Ave.*, and *16th St.*

The present site of the national capital of the United States was selected in 1790, mainly through the agency of George Washington; and the **Federal District of Columbia**, 100 sq. M. in area, was set apart for this purpose, on territory ceded by Maryland and Virginia. The Virginia portion of the district was, however, retroceded in 1846, and the present area of the District of Columbia is 69 sq. M. Its population in 1908 was 339,403 (97,483 coloured)†. The district is ruled directly by the President and Congress, through a board of Commissioners appointed under an act of 1874; and its inhabitants belong to no state and have no voice either in national or local government. The plan of the city of Washington was due to *Major l'Enfant*, a French officer of engineers; and the intention was to make the Capitol (p. 213) its centre, with streets and avenues radiating from it in all directions. It was at first proposed to call it *Federal City*, but this name was changed to Washington in 1791.

The foundation-stone of the Capitol was laid in 1793; the seat of government was removed to Washington in 1800; and in 1802 the city

† In this enumeration the city of Washington was not separately estimated.

received its charter. In 1814 the city was taken by the British, who burned the Capitol. In 1810 the population was 8208; in 1840 it was 23,364; and in 1890 it was 188,932. In 1871 the city was still in a very backward condition; but the substitution in that year of a territorial for a municipal government inaugurated a series of reforms, which completely revolutionized the appearance of the city and left it one of the most comfortable and beautiful in the world. The commerce and manufactures of Washington are relatively unimportant, and its prosperity depends on its position as the seat of Congress and the Government Offices. There are probably 40,000 army and navy officers and civil servants in Washington, and these with their families make a large proportion of the population. It is emphatically the scientific centre of the country, and its ten scientific societies contain 4000 members. The sobriquet of 'City of Magnificent Distances', applied to Washington when its framework seemed unnecessarily large for its growth, is still deserved, perhaps, for the width of its streets and the spaciousness of its parks and squares.

The best time to visit Washington is during the sitting of Congress, which lasts from the first Mon. in Dec. to March 4th in the odd-numbered years, and till June, July, or later in the even-numbered years. The city itself is seen to greatest advantage in May or October. In summer (July-Sept.) it is very hot and is deserted by many of its inhabitants. The Public Offices are all open to the public, free, between 9 or 10 and 2; and the attendants will show on application any rooms not actually occupied.

The new ***Union Railway Station** (Pl. F, 3), completed in 1908 from the designs of *D. H. Burnham*, at a cost of $4,000,000, is undoubtedly one of the most successful buildings in the country. It is situated at the junction of Massachusetts and Delaware Avenues, about $^1/_3$ M. to the N. of the Capitol. In front is a large 'plaza', to be embellished with shrubbery and fountains.

The main building, constructed of white granite, is 630 ft. long and 210 ft. wide. The simple and dignified façade is adorned with three sculptural groups. The concourse is 760 ft. long and 130 ft. wide, the main waiting-room, 220 ft. in length, is surmounted by a finely proportioned vaulted ceiling, 120 ft. in height and adorned with gilding.

In connection with the opening of the new station much work has been done on the elevation and diverting of tracks, the piercing of tunnels under the Capitol hill (for the lines to the S.), and various terminal facilities.

The ****Capitol** (Pl. F, 4), finely situated on a hill 90 ft. above the level of the Potomac, dominates the entire city with its soaring dome and ranks among the most beautiful buildings in the world. It is 751 ft. in length and 121-324 ft. wide, and consists of a main edifice of sandstone, painted white, and of two wings of white marble. It covers an area of $3^1/_2$ acres. The main building, with its original low-crowned dome, was completed in 1827; the wings and the new iron *Dome* were added in 1851-65. Numerous architects have been employed on the building, of whom it may be enough to mention *Thornton* (p. 223), the originator of the general design, *Latrobe* and *Bulfinch*, who made important modifications of it, and *T. U. Walter*, the designer of the extensions and the dome. The general style is classic, with Corinthian details. The principal façade looks towards the E., as the city was expected to spread in that direction, and the Capitol thus turns its back upon the main part of the city and on the other government buildings. [The original design, however, contemplated a W. front.] A fine marble **Terrace* (view), 884 ft.

long, approached by two broad flights of steps, has been constructed on the W. side of the Capitol and adds great dignity to this view of the building. The dome, which is 268½ ft. high, is surmounted by a figure of Liberty, by *Crawford*, 19½ ft. high (comp. p. 219). The total cost of the building has been $16,000,000.

'The History of the United States Capitol', by *Glenn Brown*, is a sumptuous illustrated work in two large vols. (1900-1903).

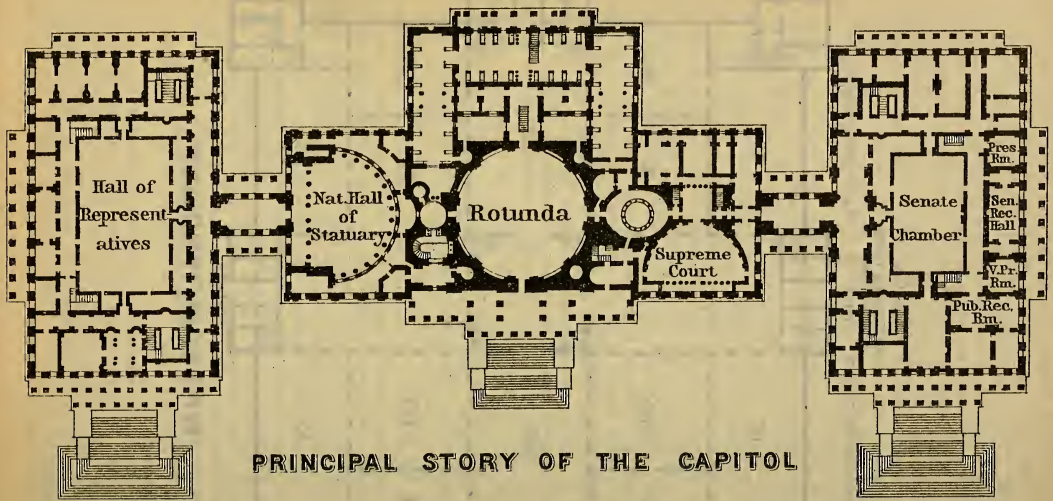
The Capitol stands in a park of about 50 acres in extent, laid out by *Olmsted*.

The *Front* or *East Façade* is preceded by three porticos, the main entrance being in the centre. To the right of the central portico is the *Settlement of America*, a marble group by *Greenough;* to the left is the *Discovery of America*, a figure of Columbus by *Persico*. In the pediment above the portico is a relief of the *Genius of America*, by *Persico;* and in the pediment above the N. portico is a group representing the *Civilization of the United States*, by *Crawford*. The inauguration of the Presidents of the United States takes place on the broad steps in front of the main doorway.

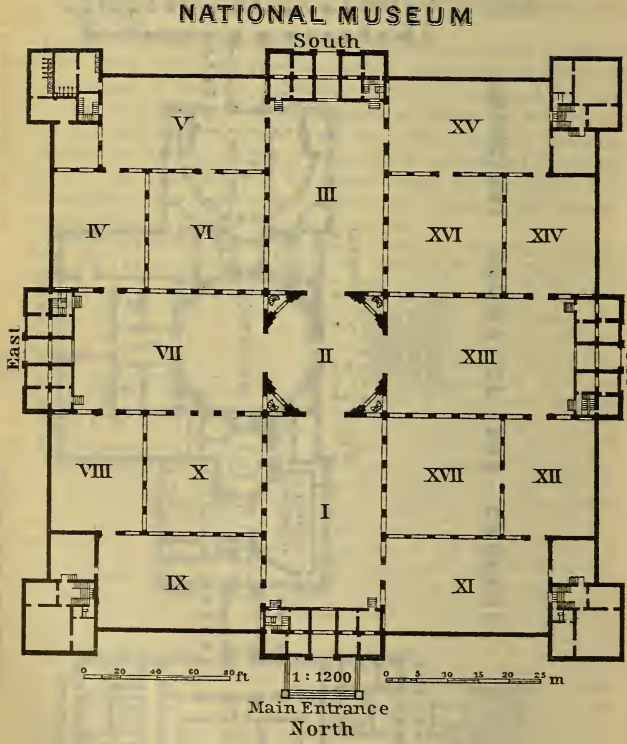
*Interior (open, 9-4; guide, unnecessary, 50c. per hr.). The beautiful *Bronze Doors* are adorned with reliefs by *Randolph Rogers*, representing events in the life of Columbus (cast at Munich, 1851). To the right and left are statues of *Peace and War*, by *Persico*. — We first enter the —

Rotunda, below the Dome, 96 ft. in diameter and 180 ft. high. The walls are adorned with eight historical paintings (named from right to left): 1. (to the right) Landing of Columbus in 1492, by *Vanderlyn;* 2. Embarkation of the Pilgrims at Delfthaven in 1620, by *Weir;* 3. Washington resigning his commission at Annapolis in 1783, by *Trumbull;* 4. Surrender of Cornwallis in 1781, by *Trumbull;* 5. Surrender of Burgoyne at Saratoga in 1777, by *Trumbull;* 6. Signing the Declaration of Independence (1776), by *Trumbull;* 7. Baptism of Pocahontas (1613), by *Chapman;* 8. Discovery of the Mississippi by De Soto in 1541, by *Powell*. Above these paintings is a band of frescoes, in imitation of relief, by *Brumidi* and *Costagini*, representing scenes from American history from the Landing of Columbus to the Celebration of the Centennial of Independence at Philadelphia. The ceiling-painting, also by *Brumidi*, depicts the Apotheosis of Washington, with figures of Liberty, Victory, the 13 Original States, and other allegorical groups. The reliefs above the doors represent the Landing of the Pilgrims, Penn's Treaty with the Indians, Pocahontas and Capt. Smith, and Daniel Boone and the Indians. The Rotunda also contains statues of Lincoln (by *Mrs. Hoxie*), Jefferson (by *David d'Angers*), Hamilton (by *Stone*), Grant (by *Simmons*), and E. D. Baker (by *Stone*), and a bronze bust of Washington by David d'Angers, presented in 1905 by the Count de Rochambeau, the Marquis de Lafayette, and other Frenchmen. — A staircase at the N.W. corner of the Rotunda ascends to the *Whispering Gallery*, in the interior of the dome, and to the lantern on the top of the dome (268½ ft.), which commands a splendid *View of Washington. Pennsylvania Avenue (r.) and Maryland Avenue (l.) diverge like the spokes of a fan, and between them is the Mall, a broad enclosure containing the Smithsonian and other public institutions, with the tall Washington Monument towering above all. The Pension Office is conspicuous to the N.W. and the Post Office is prominent on the left side of Pennsylvania Ave. The White House is almost concealed by the Treasury (at the end of Pennsylvania Ave.). — The door on the W. side of the Rotunda leads to the rooms formerly occupied by the Library of Congress (p. 216).

The door on the S. side of the Rotunda leads to the Old Hall of Representatives, now the *National Hall of Statuary, a semicircular apartment, containing statues of eminent Americans, each State being



PRINCIPAL STORY OF THE CAPITOL


NATIONAL MUSEUM
South
East
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V
XV
III
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VII
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XIII
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XII
I
IX
XI
0 20 40 60 80 ft
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0 5 10 15 20 25 m
Main Entrance
North

allowed to send 'effigies of two of her chosen sons'. Illinois sends a 'chosen daughter' in the person of Miss Frances E. Willard, the apostle of temperance. There is also a statue of Washington (cast of *Houdon's* statue, p. 556). The allegorical *Clock* is by *Franzoni*. A brass plate in the S.W. corner of the floor marks the spot where *John Quincy Adams* fell on Feb. 21st, 1848, two days before his death. This room has some curious 'whispering gallery' properties, which, however, require the aid of an habitué to discover.

Leaving the Statuary Hall by the corridor on its S. side, we next enter the wing devoted to the House of Representatives.

The **Hall of Representatives** (open to visitors before noon, when the House meets; galleries open at all times), occupying the centre of this wing, is a plain and business-like apartment, 139 ft. long, 93 ft. wide, and 36 ft. high. It contains desks for 331 members and 4 delegates. To the right of the Speaker is the pedestal on which the mace is placed when the House is called to order. To the right and left are portraits of Washington (by *Vanderlyn*) and Lafayette (by *Ary Scheffer*). On the same wall is a fresco by *Brumidi* (Washington demanding the surrender of Cornwallis at Yorktown). Like the House of Commons, the hall is lighted through glass-panels in the ceiling. The *Galleries* round the Hall can seat 2500 people; different sections are reserved for ladies (with their escorts), gentlemen, the press, the diplomatic corps, and the families of members and officials. The general proceedings of the House are roughly similar to those of the House of Commons, but the noise and confusion are greater and it is a rare thing for a speaker to receive the attention of the whole House. The Republicans affect one side of the hall, and the Democrats the other. The Speaker has no distinguishing dress, and members do not wear their hats in the House. A novel feature to the European visitor is the presence in the House of a number of page-boys, who are summoned by the clapping of hands.

The Hall is surrounded with corridors, affording access to *Committee Rooms* (many of them with frescoes) and the *Rooms of Officials*.

On the E. and W. are *Staircases* ascending to the *Galleries*. On the wall of the E. staircase is a large painting, by *Carpenter*, of the Signing of the Proclamation of Emancipation, with portraits of Lincoln and his Cabinet (Sept. 22nd, 1863); at its foot is a statue of Jefferson, by *Powers;* and at its head are portraits of Henry Clay and others. On the W. staircase is *Leutze's* large painting of Westward Ho, with a view of the Golden Gate, by *Bierstadt*, below; at the foot of the staircase is a bronze bust of an Indian chief, and at the top is a portrait of Chief Justice Marshall. The upper floor also contains various *Committee Rooms*. — The basement-floor, below the House of Representatives, contains a good *Restaurant*.

The door on the N. side of the Rotunda (p. 214) leads into the N. wing of the original Capitol (see p. 213), on the right (E.) side of which is the **Supreme Court Room**, formerly the *Senate Chamber* (open to visitors). The U. S. Supreme Court consists of a Chief Justice (Hon. M. W. Fuller) and eight Associate Justices. Sessions from Oct. to May (12-4). The judges wear robes but no wigs, the counsel neither gowns nor wigs. — In the *Robing Room* are portraits of former Chief Justices.

We now pass through a corridor leading to the Senate Wing. The *Senate Chamber is smaller (113 ft. long, 80 ft. wide, and 36 ft. high) and more ornate than the House of Representatives. The general arrangements of the seats, galleries, etc., are like those of the House, and the Senate also meets at noon. The Vice-President of the United States is the official President of the Senate; and niches in the walls contain busts of all the Vice-Presidents. The Senators are 92 in number. — To the N. of the Senate are the *President's Room*, richly adorned with frescoes and gilding; the *Senators' Reception Hall* or *Marble Room;* and the *Vice-President's Room*, with a fine portrait of Washington, by Rembrandt Peale. When the Senate is in session, visitors to these rooms require the permission of a Senator; at other times they may enter them, if open, and apply to the messengers if closed. Several of the *Senate Committee Rooms* are also handsomely decorated. — At the foot of the **E. Staircase*, ascending to the *Galleries*, is a statue of

Franklin by *Powers;* on the wall is Perry's Victory on Lake Erie (1813), a large painting by *Powell;* at the top is the *Return of Columbus*, by A. G. Heaton. Near the head of this staircase are large paintings of the Yellowstone and the Grand Canyon of the Colorado, by *Thomas Moran.* At the foot of the *W. Staircase* is a statue of John Hancock, by *Stone;* on the wall is the Storming of Chapultepec, Mexico (1847), by *Walker.* At the head of this staircase is a portrait of Washington, by *C. W. Peale.* The rooms and corridors of the *Upper Floor* contain various other portraits and paintings. In the basement is a *Restaurant.*

The **Bronze Doors* of the Senate Wing, opening on the N.E. portico, and those of the House Wing, at the S.E. portico, represent various scenes of American history, in relief, by *Crawford.*

The Basement of the Capitol contains *Committee Rooms, Storage Rooms, Restaurants* (see above and p. 215), etc. The walls and ceilings of the corridors are frescoed, and some of the Committee Rooms are also handsomely decorated (admission on application to the messengers). The *Ventilating and Heating Apparatus* is interesting. In the centre, below the Dome, is the *Crypt*, with 40 Doric columns. In a small vestibule, reached from the outside by the door under the colonnade to the right of the main steps, are *Six Columns*, in the form of stalks of Indian corn, said to have been suggested by Jefferson (comp. p. lxxxviii).

We may leave the building by the W. terrace and steps (see p. 213).

To the N. and S. of the Capitol and connected with it by subways are the *Senate* and *House of Representatives Buildings* (Pl. F, 4), two white marble edifices in a classic style (1908), containing offices for senators and representatives.

To the S.E. of the Capitol stands the ***Library of Congress** (Pl. F, 4), an enormous structure in the Italian Renaissance style, 470 ft. long and 340 ft. wide, erected in 1888-97 at a cost of $ 6,180,000. The building was accomplished by *Gen. T. L. Casey*, Chief of Engineers U. S. A., with the aid of *Bernard R. Green*, *E. P. Casey*, *J. L. Smithmeyer*, and *P. J. Peltz.* It is in the form of a quadrangle, enclosing four courts and a central rotunda surmounted by a flat gilded dome and lantern. The main entrance, on the W. side, is preceded by a broad flight of steps and a granite terrace, against the retaining wall of which is an effective fountain by *R. Hinton Perry.* At each corner and in the middle of the W. and E. façades are projecting pavilions. The sculptural adornment of the ornate W. façade includes a series of ethnological heads (over the windows), busts of Demosthenes, Emerson, Irving, Goethe, Franklin, Macaulay, Hawthorne, Scott, and Dante (portico), and groups representing Literature, Art, and Science (spandrels of the entrance-porch). The three bronze doors represent Printing (centre), Tradition (left), and Writing (right), the first by *Fred. MacMonnies*, the others by *Olin L. Warner.* — The library can accommodate 4 or 5 million vols., and at present contains 1,500,000, besides 100,000 MSS., 100,000 maps, 465,000 pieces of music, and 255,000 prints. Among special collections of note are those of Russian and Japanese works. The use of the library is free to all adults, but none but members of Congress and a few privileged officials have the right to take books out of the building. The staff numbers 300. The building is open to visitors from 9 a.m. to 10 p.m. Descriptive

handbooks at the entrance (10 c. and 25 c.). Restaurant in the attic of the pavilion (elevator). Librarian, *Dr. Herbert Putnam.*

The *Interior of the Congressional Library is sumptuously adorned with painting, sculpture, coloured marbles, and gilding (especially brilliant by electric light). These decorations, while very unequal in merit and at times somewhat confused and over-garish, produce on the whole a very imposing effect and are specially interesting as an expression of the popular national taste. No fewer than fifty American artists are represented in the work. Only a few of the numerous paintings can be mentioned below; for details the reader is referred to the works themselves and to the special handbooks mentioned above. The W. portico opens on the Main Entrance Hall, constructed of white Italian marble. To the right and left are massive marble staircases, richly adorned with sculpture and with bronze figures as lamp-bearers. The ceiling of the Hall, 72 ft. above the marble flooring, is resplendent in blue, green, and yellow. The arcade or vestibule on the W. side of the hall has stucco figures of Minerva and a coffered ceiling in white and gold. The arcade to the S. is adorned with *Paintings by *Henry O. Walker*, representing Poetry. In the N. arcade are paintings by *C. S. Pearce*, representing the Family, Religion, Labour, Study, Recreation, and Rest as factors in civilization. The E. arcade, opening from the Hall by a triple *Commemorative Arch*, contains the Evolution of the Book, painted by *J. W. Alexander*. The lobby beyond, leading to the Reading Room (see below; this entrance for readers only), has five paintings by *Elihu Vedder*, symbolizing different forms of Government. To the left of the E. arcade is the *Librarian's Room*, with a ceiling-painting of Literature by *E. J. Holslag*. — The S.W. Curtain Corridor (on the side next the court), leading to the S. from the Entrance Hall, has Greek Heroes by *Walter McEwen*. It opens on the gorgeous House of Representatives Reading Room. In the S.W. Pavilion is the more dignified Senate Reading Room, opposite which is the entrance to the Periodical Reading Room. — The N.W. Curtain Corridor has paintings of the Muses by *Edw. Simmons*. The N.W. Pavilion is decorated by *Dodge* and *Thompson;* it contains an interesting exhibition of maps and charts, continued in the Map Room.

We now ascend to the first floor. The Corridors above the arcades of the Entrance Hall are adorned with symbolical frescoes of the Virtues (in a Pompeian style) by *Maynard* (N. and S.), the Senses (on the ceiling) and figures of Wisdom, Understanding, Knowledge, and Philosophy by *Robert Reid* (N.), the Departments of Literature by *Barse* (E.), the Graces and the Seasons by *F. W. Benson* (S.), and the Sciences by *Shirlaw* (W.). The other decorations are also elaborate. The W. Corridor contains Japanese and Chinese prints, while in the N. corridor are Orientalia, early Bibles, miniature books, and bindings. — The frescoes in the S.W. Gallery, by *Kenyon Cox*, illustrate the Sciences and Arts, those in the S.W. Pavilion, by *Maynard*, illustrate the Discovery and Settlement of America. These two rooms, as well as the S. Gallery, are used for the exhibition of etchings, engravings, woodcuts, and the like. The S. Gallery also contains views and models of Washington, past, present, and future. — The panels of Peace and War in the N.W. Gallery are by *Melchers* (American MSS. and autographs; early American imprints); the paintings of Art, Literature, Music, Science, and Ambition (ceiling) in the N.W. Pavilion are by *W. L. Dodge;* the Elements in the S.E. Pavilion are by *R. L. Dodge* and *E. E. Garnsey;* the Seals of the U. S. in the N.E. Pavilion are by *Garnsey* and *Van Ingen*.

From the E. corridor (see above) a short staircase, the landing of which is adorned with a fine mosaic of Minerva by *Elihu Vedder*, ascends to the visitors' gallery of the *Reading Room Rotunda, perhaps the finest and most thoroughly satisfactory part of the whole building. The chamber, which is 100 ft. in diameter and 125 ft. in height, accommodates about 300 readers (British Museum Reading Room 458; Bates Hall at Boston 250-300). It is richly adorned with dark marble from Tennessee, red marble from Numidia, and yellow marble from Siena. The eight massive

piers are surmounted by symbolical female figures of Religion (Baur), History (French), Art (modelled by Dozzi from sketches by A. Saint-Gaudens), etc.; and along the parapet of the gallery are sixteen bronze statues of persons eminent in the fields denoted by the symbolic figures. Among these are Homer, by L. Saint-Gaudens, Shakspeare, by MacMonnies, Herodotus, by French, etc. The dome is covered with elaborate coffered ornamentation in stucco, and round its 'collar' are frescoes by *E. H. Blashfield*, representing the Progress of Civilization (best seen from the floor of the reading-room). Among the allegorical figures in this frieze may be detected portraits of Ellen Terry (England), Mary Anderson (Middle Ages), and Abraham Lincoln (America). The inside of the lantern is embellished with an allegorical group of 'Human Understanding', also by *E. H. Blashfield* (not visible from the gallery). The stained-glass windows exhibit combinations of the arms of the Union and the various States. The clock was designed by *John Flanagan*. Winding iron staircases in the piers ascend to the lantern and to an outside gallery encircling the rotunda and commanding a beautiful view. — The reading-room is admirably lighted, and the arrangements for bringing the books from the 'stacks' to the readers and the other practical equipments are of the latest and best description. It is connected with the Capitol by a tunnel 1/4 M. long, 6 ft. high, and 4 ft. wide, by means of which a Member of Congress can procure a book in 3 minutes.

The basement contains a *Reading Room for the Blind*, the *Music Division*, offices, lavatories, and store-rooms.

A large new *Temple of Justice* is to be erected to the N. of the Library of Congress.

At the foot of the flights of steps descending from the terrace on the W. side of the Capitol is a heroic *Statue of Chief Justice Marshall* (1755-1835), by Story. The broad walk to the N. (r.) leads to the *Naval* or *Peace Monument*, by Simmons. The walk to the S. (l.) leads to the *Statue of President Garfield* (1831-81), by J. Q. A. Ward.

The first part of the Reservation is occupied by the **Botanic Gardens** (Pl. E, F, 4; 9-6), with palm-houses, conservatories, and the handsome *Bartholdi Fountain*.

We may now walk through the two small parks to the W. of this point and visit the building of the *United States Fish Commission* (Pl. E, 4; entr. in 6th St.; 9-4), where the processes of fish-breeding may be inspected (aquarium). — A little farther to the W., beyond 7th St., stands the *Army Medical Museum* (Pl. E, 4; 9-4), containing a pathological collection, a collection of army medical supplies, and a library of 200,000 volumes. The exhibits all bear labels, and explanatory tablets are placed at the entrances to many of the rooms. In the library are cases with rare and old works on medicine, a touch-piece used for the King's Evil, and other curiosities. — Adjacent are monuments to *Daguerre* (1789-1851) and to *Dr. Samuel D. Gross* (1805-84); the latter, by A. St. Calder, was erected by American physicians in 1897.

Immediately to the W. of the Medical Museum is the ***National Museum** (Pl. E, 4), a large brick building 325 ft. square, containing valuable and excellently arranged collections of natural history, anthropology, and geology, derived mainly from the scientific operations of the U. S. Government (new building, see p. 221). It is under the direction of the Smithsonian Institution (p. 220). Over

the entrance is a group representing Columbia as protectress of Science and Industry. Admission free, 9-4.30 (closed on Sun.). As Prof. Münsterberg points out, this, like other American museums, is not so much a collection of articles with their labels as a series of instructive labels, illustrated by typical specimens.

Department of Anthropology. The NORTH HALL OF HALL OF AMERICAN HISTORY (Pl. I), which we first enter, is mainly devoted to a chronologically arranged series of collections illustrating American history from the period of discovery to the present day. Among the more interesting of the personal relics are those relating to Washington, Lincoln, Franklin, and Grant. The wall-cases are mainly occupied by musical instruments. Over the entrance is a large panel of Limoges fayence, representing man's triumphs over the material universe, and at the entrance to the Rotunda are two large vases of Limoges fayence made to commemorate the centennial of the Declaration of Independence. — The ROTUNDA (Pl. II) is embellished with a fountain, above which rises the original model of the statue of Liberty on the dome of the Capitol (p. 214). Large figures of Buddha and Vishnu. Cases with Buddhistic relics from Burma; others with historical relics of the war with Spain (from Cuba and the Philippines). — In the WEST NORTH RANGE (Pl. XI) is the *Collection of Paintings by *George Catlin*, illustrating the manners and customs of the North American Indians. Mr. Catlin spent 8 years (1832-40) among the Indians, visiting 48 different tribes and painting all of the 600 paintings from nature. The floor-cases illustrate the arts and customs of the Indian tribes between the Atlantic coast and the Rocky Mts. — To the S. lies the NORTH WEST RANGE (Pl. XII), with interesting exhibits pertaining to the tribes of the N.W. coast of N. America (totem-poles, etc.) and of the Esquimaux on the Arctic shores. — To the left is the NORTH WEST COURT (Pl. XVII), the exhibits of which illustrate the life of the Pueblo Indians of the S.W. (comp. p. 221). The gallery above, entered from the Rotunda, contains collections of tribes in the S.W. part of N. America and Mexico. — The WEST HALL (Pl. XIII), entered from the N W. Range, contains European, African, and Asiatic collections, the Japanese and Corean exhibits being especially attractive. Here also is part of the Glover Collection of Chinese coins. The N. Gallery has Polynesian collections, and the S. Gallery has a collection of religious ceremonial objects.

We now cross the Rotunda to the EAST HALL (Pl. VII), which contains collections illustrating human progress in transportation, electricity, domestic arts, etc. In the S.E. corner is a small *Restaurant*. — The NORTH EAST RANGE (Pl. VIII) is occupied by a very extensive series, illustrating naval architecture. — The NORTH EAST COURT (Pl. X), entered from the East Hall, is occupied by the graphic art exhibit. The gallery contains collections of ceramics, etc. — The EAST NORTH RANGE (Pl. IX) now contains a number of paintings, bequeathed to form a nucleus for a National Museum of Art (comp. p. 224). These include the *Harriet Lane Johnston Collection*, with examples of Pourbus, Janssens, Beechey, Hoppner, Constable, Lawrence, Romney, and Reynolds; the *Edward Moran Collection* of scenes from American naval history; and the *Tuckerman Collection*, with works by Vibert, Zamacoïs, and others. On one wall hangs 'The March of Time', a huge work with numerous portraits, by *Henry Sandham*.

[The extensive collection of American antiquities is exhibited in the Smithsonian building, first floor (see p. 221).]

Department of Biology. This Department covers the field of zoology and botany. The collections exhibited are chiefly American, but the museum is also rich in material from all parts of the world. — To the S. of the East Hall is the SOUTH EAST RANGE (Pl. IV), with casts of American fishes, reptiles, and batrachians. — The EAST SOUTH RANGE (Pl. V) contains an extensive osteological collection arranged systematically. The cast of one side of a Humpback whale, 32 feet long, with the skeleton inserted in it, and skeletons of various other whales are suspended from the ceiling. Special series illustrating such subjects as

the homologies of the skull and limbs, the structure and modifications of teeth, skin, etc., are also exhibited, and an extensive series of embryological models. The collections include specimens of great rarity, such as skeletons of the extinct Arctic Sea Cow from the Commander Islands, Bering Sea, the Great Auk from Coast of Labrador, and the Gigantic Land Tortoise of Abingdon Island, in the Galapagos Archipelago. — The South Hall (Pl. III) is devoted to mammals. The groundfloor is occupied by an extensive series of American mammals, including well-mounted specimens of the bison, moose, caribou, and prong-horn antelope, with accessories representing their natural surroundings. The gallery of this hall (entrance from the Rotunda) contains a representation of the mammal-fauna of the Old World. The African antelopes are especially interesting.

Department of Geology. The South West Range (Pl. XIV), entered from the W. Hall, is occupied by the exhibits of the *Division of Mineralogy*. The principal series are collections of minerals (some 8000 specimens), cut stones (3500 specimens), and meteorites (300 specimens). — In the *Division of Systematic Geology*, in the West South Range (Pl. XV), are exhibited (a) collections of rock-forming minerals and rocks, (b) an especially fine series of cave and volcanic products and an American stratigraphic series of rocks and fossils. — The *Division of Applied Geology* in the South West Court (Pl. XVI) contains economic materials, comprising on the groundfloor (a) an extensive series (3000 specimens) of building and ornamental stones and (b) a series illustrating the mineral resources of the United States. In the gallery is a systematic series of economic products, comprising ores of gold, silver, copper, coals, petroleums, etc. — The South East Court (Pl. VI; entered from Room V) contains the exhibits of the *Division of Vertebrate Palaeontology*, including a considerable series of vertebrate remains, mainly American, and especially rich in the striking *Triceratops* forms from the Cretaceous formations of Wyoming; rare specimens of *Brontotherium*, *Elotherium*, *Miohippus*, and other genera from the Miocene, and *Rhinoceros* and other mammals from the Pliocene formations. In the gallery (entrance from the Rotunda) is a systematic series of invertebrate fossils, probably the richest in the world in Cambrian forms. The collection of fossil insects is also large, the palæozoic portion being equalled only by that from the coal fields of Commentry, France. In the galleries of the E. S. and W. S. Ranges are fossil plants, including the 'Lacoe Collection' (100,000 specimens from the Pennsylvania coal-measures).

Just to the W. of the National Museum stands the ***Smithsonian Institution** (Pl. D, 4; open free on week-days, 9-4.30), a red stone building in the late-Norman style, erected in 1847-56 at a cost of $ 450,000 (90,000 *l.*). The loftiest of the nine towers is 145 ft. high. In front of it is a Statue of Prof. Joseph Henry (1799-1878), the first secretary of the Institution, by *Story*. Secretary, Chas. D. Walcott.

The Smithsonian Institution was founded with the proceeds of a legacy of $ 515,000 bequeathed by an Englishman, *Mr. James Smithson* (1765-1829), a natural son of the Duke of Northumberland, 'for the increase and diffusion of knowledge among men'. So far as is known Mr. Smithson, who was distinguished as a chemist and mineralogist, never visited America†, and had no personal relations with that country; and his choice of Washington for the establishment of his institution is supposed to be due to his sympathy with the democratic principles represented by the Western Republic. The policy of the Institution is to encourage research, and it has been the chief promotor of the scientific investigation of the climate, products, and antiquities of the United States. It possesses a library of 250,000 vols. (deposited in the Library of Congress) and issues three series of publications of great scientific value.

The Ground Floor is devoted to part of the exhibits of the *Biological*

† His remains were brought to America in 1904 and placed in the Smithsonian Institution.

Department of the National Museum (p. 219). The Main Hall contains a systematic Collection of Birds (9000 specimens) and also the Collection of Mollusks. A small room to the S., opposite the entrance, contains birds, insects, shells, corals, sponges, and minerals arranged for the study of children. — In the adjoining Corridor Hall is the Collection of North American Insects, with exhibits illustrating protective mimicry and kindred phenomena. — The West Hall contains a colossal statue of George Washington, by Greenough, and the Marine Invertebrates. From the roof hang models of the giant squid and the octopus.

The First Floor contains the **Archaeological Collections of the Department of Anthropology* (p. 219), which, as regards American antiquities, are very extensive. A number of 'Culture Regions' are especially well represented: — 1. *Mexican and Central American Collections*, including many casts of stone monuments. — 2. *Miscellaneous Collections of Indian Relics*, such as are found generally distributed over the United States and the British Possessions. — 3. *Collections from the Mounds*, including sculptures, tobacco-pipes, pottery, and implements of stone, bone, shell, and copper.

On the opposite side of the Mall, facing the Smithsonian, is the ***New National Museum** (Pl. D, 4), a large and dignified building in white granite, by *Hornblower & Marshall*. It will be ready in 1910. The exterior has been designed to harmonize with the older public buildings in Washington based on classic forms.

The next part of the Mall, beyond 12th St., contains the building of the **Department of Agriculture** (Pl. D, 4; 9-4). It includes a herbarium and conservatories of economic plants (all open to visitors); and the grounds in front of it are devoted to an arboretum arranged by families. The library and several bureaux of the Department have been transferred to a new white marble and brick building of which the wings were completed in 1908. To the E. of the old building is the *Sequoia Tree Tower*, formed of a section of a huge Sequoia (p. 465), which was 26 ft. in diameter at the base and 300 ft. high.

In B St., near the S.W. corner of the Agricultural Grounds, is the ***Bureau of Engraving and Printing** (Pl. D, 4), where the highly interesting processes of the manufacture of paper money, bonds, and stamps are shown to visitors (9-11.45 and 12.30-3).

We have now reached the open grounds in which the ***Washington Obelisk** (Pl. D, 4), a unique monument of dignity and simplicity, rears its lofty form to the skies.

The Washington Obelisk, a worthy memorial of a great man, was begun in 1848, abandoned in 1855, resumed in 1877, and finished in 1884, at a total cost of $1,300,000 (260,000*l.*). It is constructed of white Maryland marble and is 555 ft. high (Metropolitan Life Insurance Building at New York, 693 ft.; Philadelphia City Hall, 547 ft; spires of Cologne Cathedral 511 ft.). The walls are 15 ft. thick at the base and 1½ ft. at the top. The pyramidal roof is 55 ft. high and is capped with a piece of aluminium. The monument is open from 9 to 5.30, and may be ascended either by the 900 steps (fatiguing; 20-25 min.) or by the elevator (8 min.; fee) which runs every ½ hr. (last ascent at 4.30). Stone tablets presented by different States and corporations are inserted in the walls.

The top commands a magnificent *View of the city of Washington and its surroundings. Arlington (p. 227) is seen to the E. across the Potomac. Among the points at a little distance are the Observatory (p. 226; N.W.), the Soldiers' Home and Howard University (p. 226; N.),

the R. C. University (p. 227; N.E.), and Alexandria (p. 228; S.). On a clear day the Blue Ridge Mts. are seen to the N.W., the prominent Sugar-loaf being about 50 M. distant.

To the S. of the Obelisk are the *Propagating Gardens* (Pl. C, D, 4). Along the river here extends the *Potomac Park and Speedway* (Pl. B-D, 4, 5), with two bridges (Pl. C, 5) near the site of the old Long Bridge, over which the Federal troops marched into Virginia during the Civil War.

We may now ascend 15th St., skirting the *President's* or *Executive Grounds* (Pl. C, D, 3, 4; band in summer) on the left and passing *Chase's Theatre* (*Grand Opera House;* p. 211) and the *Light Infantry Armoury* on the right. To the left, opposite the Regent Hotel (p. 211), is the fine equestrian **Monument of General Sherman* (1820-91), by Rohl-Smith, erected in 1903. The pedestal is embellished with bronze reliefs, medallions, and figures of Indian women, and at the corners of the podium are four sentinels. — To the N. of this, opposite F St., stands the **Treasury Building* (Pl. D, 3; 9-2, parties led round between 11 & 12 and 1 & 2), an immense edifice, 510 ft. long and 280 ft. wide, with an Ionic colonnade on the E. front and porticos on the other three sides (entrance at N.E. corner). Among the chief objects of interest are the *U. S. Cash Room*, in the N. corridor; the *Redemption Division*, in the basement; the *Silver Vaults*, containing bullion and coin to the value of hundreds of millions of dollars; and the *Secret Service Division*, W. side of 2nd floor, with its collection of forged money and portraits of forgers.

In Pennsylvania Ave., to the N. of the Treasury, stands the *Department of Justice;* and a little farther to the N., at the corner of 15th and H Sts., is the *George Washington University* (Pl. D, 3; 1500 students). Opposite the last, with its façade in H St., is the new building of the **Union Trust Co.*, by Wood, Dunn, & Deming (1908). — In the Bond Building, at the S.W. corner of New York Ave. and 14th St., is the office of the **Carnegie Institution**, founded by Mr. Carnegie in 1902. The endowment is now $12,000,000.

The object of the Foundation, to advance scientific research, is promoted on the one hand by a variety of special grants to individual investigators, and on the other hand by systematic researches carried out by a number of organized departments (astronomical, botanical, biological, economic, geophysical, historical, etc.). Most of these departments have their chief seat of work in other places in the United States, selected because of their special fitness for the particular work. The departments of research in geophysics (p. 227), terrestrial magnetism, and history are located in Washington. — A dignified permanent building is being erected at the S.E. corner of 16th and P Sts. (Pl. D, 2).

Following Pennsylvania Ave. towards the W., we reach (to the right) Lafayette Square (Pl. C, D, 3), with a bronze *Statue of Gen. Andrew Jackson* (1767-1845), by Clark Mills, the *Rochambeau Monument* (S.W.), by F. Hamar (1902), and the *Lafayette Monument* (S.E.), by Falguière and Mercié. On the E. side of the square is the *Belasco Theatre* (Pl. D, 3), occupying the site of the house in which an attempt was made to assassinate *Secretary Seward* in 1865.

Opposite Lafayette Sq. is the entrance to the ***White House** or *Executive Mansion of the President of the United States* (Pl. C, D, 3).

The Executive Mansion is a two-storied stone building, painted white, 170 ft. long and 86 ft. deep, with an Ionic portico. It was founded in 1792, occupied by President Adams in 1800, burned by the British in 1814, and rebuilt in 1818. In 1902-3 the whole building was admirably restored, within and without, by Mr. McKim, who resuscitated many features of the original architect, James Hoban. The public entrance is now in a colonnade to the E., whence a basement-corridor, hung with portraits of Mistresses of the White House and containing specimens of the china used in the White House at various epochs, leads to the staircases ascending to the public rooms. The corresponding esplanade or terrace on the W. side connects the house with the new *Executive Offices* and *Cabinet Room*. — The large *East Room* (80 ft. × 40 ft. × 22 ft.) is open to the public from 10 to 2. The *Reception Rooms*, which contain portraits of Presidents and valuable gifts, and the handsome *Dining Room* are shown by special order only. The rest of the house is private. — The *Grounds* surrounding the house are 75 acres in extent. The Marine Band (p. 211) gives concerts in the grounds to the S. of the house, on Sat. afternoons in summer, and children have the privilege of rolling their coloured eggs here at Easter.

To the W. of the White House is the huge building of the **State, War, and Navy Departments** (Pl. C, 3; 9-2), enclosing two courts and measuring 567 ft. in length by 342 ft. in breadth.

The N. and W. wings are occupied by the War Department, where the Secretary's Apartments and the adjoining corridors contain a collection of *Portraits of Secretaries of War and Generals*, including one of Washington by D. Huntington. The *Library*, on the 4th floor, contains a fine collection of books on military science and the late Civil War.

The Navy Department is in the E. part of the building and contains models of war-ships, portraits, etc. The *Library*, on the 3rd floor, is a fine room with 25,000 volumes.

The *Department of State (corresponding to the Foreign Office in London) occupies the S. part of the building. Among the rooms usually shown to visitors are the *Diplomatic Reception Rooms*, containing portraits of the Secretaries of State from 1789 to the present day, and the *Library* (2nd floor; 70,000 vols.), with Jefferson's original draft of the Declaration of Independence and other relics.

To the W. of the State Building, between 18th and 19th Sts., is the site of the new *Hall of Records*. — At the corner of 18th St. and New York Avenue is *Octagon House* (Pl. C, 3), an interesting building of 1798-1800 by Thornton (p. 213), now owned and occupied by the American Institute of Architects.

In 17th St., to the S.W. of the State Building, between New York Ave. and E St., is the ***Corcoran Gallery of Art** (Pl. C, 3), built and endowed by the late *Mr. W. W. Corcoran* and open daily, from 9.30 (Mon. from 12) till 4 and on Sun. from 1.30 to 4.30 (holidays 10-2; adm. on Mon., Wed., & Frid. 25 c.; other days free; closed on Christmas and from July 1st to Oct. 1st). The present building, erected in 1894-97, is a handsome white marble structure in a Neo-Grecian style, by Ernest Flagg. The semicircular hall at the N. end is used for occasional exhibitions, while the rest of this part of the building is occupied by a School of Art (300 pupils). The steps to the main entrance are flanked by colossal bronze lions, modelled on those by Canova at the tomb of Pope Clement XIII. Catalogue of paintings 25 c., of casts, etc., 15 c.

Ground Floor. The ATRIUM contains casts. — The numbers over the doors are not the numbers of the rooms, but the following description begins on the E. side, to the left of the staircase, and takes them in consecutive order. ROOM I. Bronzes by *Barye* (over 100 pieces). — ROOM II. Original sculptures, including busts by *Powers* and *Rauch* (Alex. von Humboldt), the Sun Vow group by *MacNeil*, and a large bust of Emp. William II. by *Schott*. — ROOM III. Sculptures. *2010. *Powers*, Greek slave (1843); 2006. *Canova*, Colossal head of Napoleon; 2015. *Rinehart*, Endymion. — ROOM IV. Large English and Japanese vases. Electrotype reproductions. — ROOMS V-VII. Casts. In R. VII are one or two small bronzes by *Remington*. — The other rooms on this floor are occupied by the library, offices, etc.

Upper Floor. CENTRAL HALL. *Last Days of Napoleon I., a seated marble figure by *Vincenzo Vela*. — The Central Hall also contains temporarily the *Evans Collection of the National Gallery* (comp. p. 219), including specimens of *Inness*, *La Farge*, *Blakelock*, *Twachtman*, *Homer Martin*, *W. Homer*, *Abbey*, *Wyant*, and other American painters. — ROOM I (N.W.), contains a collection of pictures lent by ex-Senator W. A. Clark, including a good **Rembrandt* and other works by or ascribed to eminent masters. — ROOM II (N.E.). To the left: *Thomas Cole*, 2. The departure, 4. (farther on), The return; 3. *C. H. Boughton*, The heir presumptive; 1. *C. L. Elliott*, Portrait of Mr. Corcoran; 7. *Whittredge*, Landscape; 18. *Boughton*, Edict of William the Testy; 10. *R. N. Brooke*, Pastoral visit; 17. *Kensett*, Landscape; 19. *Harry Chase*, Harbour of New York; 28. *Bridgman*, Procession of the Sacred Bull Apis-Osiris; 30. *W. T. Richards*, Coast-scene; 36. *F. E. Church*, Niagara Falls; 140. *George Fuller*, Loretto. — In the small room adjoining are a few small pictures, including 210. Landscape, by *Joseph Jefferson*, the actor; 202. The relief ship, and 206. Distributing supplies in a Russian famine, both by *Aivasowsky*. — ROOM III. Left: *44. *Brush*, Mother and Child; 53. *W. L. Picknell*, The road to Concarneau; 62. *Edwin Lord Weeks*, Departure for the hunt (India); 67. *Inness*, Landscape; 71. *Winslow Homer*, Light on the sea; 75. *Ben Foster*, The lonely road. R. III. has several other landscapes by *Doughty*, and other American painters. — ROOM IV. 79. *Schreyer*, Watering-place; 80. *J. A. Breton*, Breton widow; 83. *Pauwels*, Justice to Lievin Pyn; 84. *Cazin*, Moonlight in Holland; 85. *Diaz*, Approaching storm; 87. *Josef Israels*, By the cradle; *89. *Corot*, Wood-gatherers; 93. *Dupré*, The pond of the great oak; *99. *Daubigny*, Scene on the Seine; 95. *Otto von Thoren*, Lost dogs; 96. *Van Marcke*, Landscape with cattle; 98. *Isabey*, Wedding; 102. *C. L. Müller*, Charlotte Corday in prison; 105. *J. Faed*, Shakspeare and his contemporaries; 106. *George Morland*, The farm-house; 109. *Vibert*, The schism; 110. *Henner*, Joan of Arc in infancy; 112. *Leroux*, The Vestal Tuccia; 113. *Troyon*, Going to drink; 116. *Courbet*, Landscape; 118. *F. H. Kämmerer*, Beach at Scheveningen; *119. *Detaille*, Passing regiment. — ROOM V. 137. *Renouf*, A helping hand; *Braekeleer*, 136. Happy family, 139. Unhappy family; 141. *Björck*, Nail-makers. — ROOM VI. Portraits of Presidents and others, including works by *Gilbert Stuart*, *Healy*, *Sully*, *Malbone* (himself), *R. Peale*, *Duplessis*, *Lenbach* (Bismarck), and *Gutherz* (Miss Susan B. Anthony). — ROOM VII. 159. *Detaille*, General of the First Empire; 161. *Cazin*, Landscape; 164. *Van Marcke*, Cattle; 166. *M. Menpes*, Vista; 168. *Rosa Bonheur*, Bull; 170. *E. L. Warner*, Broadway on a rainy evening (water-colour); 172. *Detaille*, French cuirassiers with Bavarian prisoners; 175. *De Neuville*, Champigny. — ROOM VIII. 185. *A. Bierstadt*, Mt. Corcoran; 186. *R. Peale*, Washington before Yorktown; 187. *Ary Scheffer*, Count Eberhard of Wurtemberg; 188. *O. Achenbach*, Festival at Naples; 189. *W. M. Chase*, The model (pastel); 190. *Vail*, Ready about; 192. *Gérôme*, Cæsar dead.

Also in 17th St., a little to the S. of the Corcoran Gallery, are the new *Continental Hall* (Pl. C, 3), built by the Daughters of the American Revolution, and the new building of the *International Bureau of American Republics* (Pl. C, 4), designed by Kelsey & Cret.

The latter, to be erected at a cost of $ 1,000,000 ($ 750,000 contributed by Mr. Andrew Carnegie), will serve as the international headquarters of 21 American Republics. Director, Mr. John Barrett.

We now return to the Treasury (p. 222) and follow F St. towards the E. to the **General Land Office** (Pl. E, 3), a handsome building in the Corinthian style. Opposite stands the **Department of the Interior** (9-2), often called the *Patent Office* from one of its most important bureaux, a huge building, with a Doric portico.

This building contains the rooms of the Secretary of the Interior, the Indian Office, etc. (adm. on application to the attendants). The upper floor is occupied by four halls containing a *Collection of Patents and Models*. Some of the most interesting have been removed to the National Museum (p. 218).

At 5th St. F St. reaches Judiciary Square (Pl. E, 3), on the N. side of which stands the **Pension Office** (open 9-4), an enormous barn-like structure of brick, 400 ft. long and 200 ft. wide. It is surrounded by a terracotta frieze, illustrating military and naval operations. The interior, with its mammoth columns (75 ft. high), can accommodate about 20,000 people at an inauguration ball. — On the S. side is the *District Court House* (or *City Hall*), occupied by the District of Columbia Courts. In front is a column bearing a *Statue of Lincoln*, by Flannery. Hard by, in the triangle between 3rd St. and Indiana Ave. (Pl. E, 3), is a statue of *Gen. A. Pike*. Near by, in B St., between 1st and 2nd Sts., is the large **Census Bureau** (Pl. E, F, 4), in which a large staff is constantly at work. The enumerating machines are especially interesting. This bureau belongs to the *Department of Commerce & Labour*, the temporary offices of which are at 513 14th St. — To the N.E. of this point, at the cor. of N. Capitol and H Sts., is the *Government Printing Office* (Pl. F, 3; parties shown round at 10 and 2), a 12-story building erected at a cost of $ 2,000,000.

Ford's Theatre (Pl. D, 3; now used by Government), in which President Lincoln was assassinated by Wilkes Booth on April 14th, 1865, is in 10th St. A house opposite (No. 576) bears a tablet stating that Lincoln died there and contains a collection of Lincoln relics (adm. 25 c.). — On the S. side of Pennsylvania Ave., between 11th and 12th Sts., is the **Post Office** (Pl. D, 3; 1899), with a tower 300 ft. high. It accommodates the U.S. Post Office Department, the Auditor for the P. O. Department, and the City Post Office. The *Dead Letter Office Museum*, on the groundfloor, is open from 9 to 4. — At the corner of Pennsylvania Ave. and 14th St. is the new **District Building* (Pl. D, 3), completed in 1908, and occupied by the District Commissioners (p. 212) and other officials of the local government.

At the intersection of Massachusetts Ave. and New York Ave. is *Mt. Vernon Square*, containing the **Public Library* (Pl. E, 3), a white marble building, presented by Mr. Andrew Carnegie and designed by Ackerman & Ross. It contains about 105,000 volumes. Librarian, Mr. George F. Bowerman.

A visit may be paid (tramway along 9th St.) to the *Washington Barracks* (Pl. E, 6), now used as an artillery station (drill 9-11 a.m.) and the **Army War College* (Pl. E, 6), a fine brick building by

McKim, Meade, & White (1903-8). In front of it is a *Statue of Frederick the Great* by T. Uphues, presented to the United States by Emp. William II.

About 1 M. to the N.E. (tramway on M St.), on the *Anacostia* (p. 212), is the **Washington Navy Yard** (Pl. G, 5; open from 9 a.m. to sunset), with a museum, an important gun-foundry, and manufactories of naval stores. — A little to the N. are the *Marine Barracks* (Pl. G, 5), where the band plays in summer every Mon. at 11 a.m. — Farther to the E. are the *Congressional Cemetery* (Pl. H, 5), containing the graves of many Members of Congress; the *U. S. Jail* (10-4); and the *Alms House.* — On the S. side of the Anacostia is the large *Government Insane Asylum* (Pl. G, 6; 1500 inmates). — From the Jail we may return through Massachusetts Ave. to (3/4 M.) *Lincoln Square* (Pl. G, H, 4), with Ball's Emancipation Group (comp. p. 263), whence tramways and omnibuses run to the city.

In the N.W. part of the city lies the **Naval Observatory** (Pl. A, 1; 9-3), which is excellently equipped. Visitors are sometimes admitted on Thurs. evening to look through the 26-inch equatorial telescope (by special permit from the Superintendent). — The old Observatory is now used as a *Museum of Hygiene* (Pl. B, 3; 9-2), and a statue of Dr. Benj. Rush (1745-1813) has been placed in its grounds. — At the corner of M and 24th Sts. is the *Signal Office and Weather Bureau* (Pl. B, 2; 9-2). The arrangements for forecasting the weather are most interesting.

Many of the CIRCLES (see p. 212) are adorned with statues, among which are the following: *Washington* (equestrian), by Clark Mills, in Washington Circle (Pl B, 3); *Gen. Sheridan* (equest.), by Gutzon Borglum, in Sheridan Circle (Pl. B, 2); *Adm Dupont*, by Launt Thompson, in Dupont Circle (Pl. C, 2); *Gen. Winfield Scott* (equest.), by H. K. Brown, in Scott Circle (Pl. C, D, 2), which also contains a monument to *Hahnemann* (1755-1843), the founder of homeopathy, by Ch. H. Niehaus; *Adm. Farragut*, by Mrs. Hoxie (Vinnie Ream), in Farragut Sq. (Pl. C, 3); *Gen. McPherson* (equest.), by Rebisso, in McPherson Sq. (Pl. D, 3); *Gen. Thomas* (equest.), by J. Q. A. Ward, in Thomas Circle (Pl. D, 2); *Martin Luther* (just to the N. of the last), a replica of the figure by Rietschel (at Worms); *Ben. Franklin*, by Plassman and Juvenal, at the intersection of Pennsylvania Ave. and 10th St. (Pl. D, 3); *Gen. Logan* (equest.), by F. A. Simmons, in Iowa Circle (Pl. D, 2); *Gen. W. S. Hancock* (equest.), by Ellicott, and *Gen. Rawlins*, by Bailly, at the crossing of Louisiana and Pennsylvania Aves. (Pl. E, 4); *Gen. Greene* (equest.), by Brown, in Stanton Sq. (Pl. G, 3, 4); *Gen. McClellan* (equest.), by MacMonnies, at the intersection of Connecticut Ave., Columbia Road, and California St. (Pl. C, 1).

The Columbia Institution for the Deaf and Dumb (Pl. G, 2) consists of two parts, the *Kendall Green School* and *Gallaudet College.* In the grounds is a bronze group by Dan. C. French, Gallaudet teaching a deaf child.

One of the favourite DRIVES in Washington is that to the **Soldiers' Home**, a large asylum for old soldiers (750 inmates), situated in a beautiful park to the N. of the city, 3 M. from the Capitol (also reached by tramway). On the way to it we pass the *Howard University* (Pl E, 1), founded in 1867 for the education of youth irrespective of colour or sex (1000 students). The grounds of the Soldiers' Home afford fine views ('Capitol Vista', etc.) and contain a *Statue of Gen. Scott*, founder of the Home, by Launt Thompson. President Lincoln spent part of the summers of his pre-

sidential term in one of the cottages at the Soldiers' Home. — To the N. lies the *National Military Cemetery*, with the graves of Gen. Logan, Gen. Kearney, and 7000 soldiers. On the W. this is adjoined by *Rock Creek Cemetery*, containing Saint-Gaudens's beautiful *Monument to Mrs. Henry Adams. — To the E. of the Soldiers' Home Park is the important Catholic University of America (200 students), around which has grown up a somewhat remarkable group of ecclesiastical establishments, including a *Franciscan Convent*, houses of the *Dominicans*, *Paulists*, and *Marists*, and *Trinity College* (for young women). We may now return viâ *Glenwood Cemetery* (Pl. F, 1).

Georgetown (Pl. A, B, 2), or *West Washington* (tramway), beyond *Rock Creek*, lies at the head of the Potomac navigation and is the port of entry for the District of Columbia. It contains large flour-mills, the handsome *Georgetown University*, an old Jesuit institution founded in 1789 (785 students; fine library), and the *Convent of the Visitation* (Pl. A, 2). In M St., near the Aqueduct Bridge, is the house of *Francis Scott Key* (p. 350). In *Oak Hill Cemetery* (Pl. B, 2) is the grave of *John Howard Payne* (pp. 77, 81).

To the N. of Georgetown, on Rock Creek, lies the *National Zoological Park (comp. Pl. C, 1), reached from Washington in 1/2 hr. by two lines of tramway. This large park (170 acres; open free) does not contain a very large number of animals, but it is interesting to see such native animals as the bison and moose in the comparative freedom of their extensive enclosures. The large aviary (158 ft. long), the kangaroos, the house of the smaller carnivora, the beavers, and the prairie dogs deserve special attention. — The new *Concrete Bridge* (1908; 1420 ft. long) over the Rock Creek (Pl. B, 1), a little to the S. of the Zoological Park, will interest both expert and layman. — One line of cars goes on past the Zoological Park to *Chevy Chase*, with its country club and golf-links. — *Rock Creek Park, to the N. of the Zoological Park, has an area of over 1600 acres and extends to the District line. Its natural beauties are very great. — On *Mt. St. Alban*, near *Woodley*, to the N.W. of Georgetown, is the *Peace Cross*, a large Celtic cross erected at the close of the war with Spain (1898) on the grounds of the new *Episcopal Cathedral*, of which the corner-stone was laid in 1907. It affords a fine view of Washington. — On the Chevy Chase Road, to the N.W. of the Zoological Park, are the *National Bureau of Standards* and the *Geophysical Laboratory* of the Carnegie Institution (p. 222).

To Arlington and National Cemetery. A 'Sight Seeing Automobile' leaves 600 Pennsylvania Ave. at 10, 2, and 4 for a visit to Arlington Cemetery and Fort Meyer (fare $ 1 1/2). Or we may go by tramway to the *Union Station* (Pl. A, 2) at the *Georgetown Aqueduct* (Pl. A, 3), cross the bridge, and take the electric car to (1/4 hr.) the gate near (1 M.) *Fort Myer* (return-fare 15 c.). Another alternative is to take the electric car from the cor. of Pennsylvania Ave. and 13 1/2 St. to the Sherman Gate of the cemetery (hourly; return-fare 20 c.). Public carriages (hardly necessary) meet the cars at the Fort Myer gate and make the round of the cemetery (25 c.; stopover allowed at the mansion). The National Cemetery (Pl. A, 4, 5) contains the graves of about 16,000 soldiers. *Arlington House, in the middle of the grounds, 200 ft. above the river, was once the residence of *George Washington Parke Custis* (step-grandson of Washington) and afterwards of *Gen. Robert Lee* (p. 193), who married Miss Custis. Fine *View of Washington. Near the house are the graves of *Gen. Sheridan* (d. 1888), *Adm. Porter* (d. 1891), *Gen. Lawton* (d. 1899), *Gen. Wheeler* (d. 1906), and other distinguished officers. To the S. is a tomb containing the remains of 2111 unknown soldiers. The sailors destroyed by the blowing up of the 'Maine' in 1898 and other victims of the war with Spain are buried in the S. part of the cemetery (monument).

From the Union Station at *Georgetown* (see above) the Washington and Great Falls Electric Railway runs along the *Palisades of the Potomac* to (7 M.) *Cabin John Bridge*, one of the largest stone arches in the world (220 ft.; Petrusse Valley Bridge in Luxembourg 275 ft.), built by Gen. Meigs for the Washington Aqueduct (fare 10 c.). About 1 M. short of the bridge is *Glen Echo Park*, the headquarters of the *Red Cross Society*. About 5 M.

beyond the bridge are the **Great Falls of the Potomac.* — On *Wesley Heights*, to the N. of this line, is the *American University* (Methodist).

From Washington to Norfolk, 196 M., steamer daily (from 7th St. Wharf) at 6.30 p.m., arriving at 8 a.m. (fare $ 3, stateroom $ 1-3; second class $ 2, berths free). — From Washington to *Mt. Vernon*, see below; thence to (105 M.) *Point Lookout*, see p. 210. — 184 M. *Fort Monroe*, see p. 563; 192 M. *Newport News*, see p. 561. — 196 M. *Norfolk*, see p. 561.

Railway Excursions to *Annapolis* (p. 209), *Harper's Ferry* (p. 351), the *Shenandoah Valley* (p. 597), etc. A special through-train of the Washington, Baltimore, & Annapolis Electric Railway, starting at the corner of 15th and H Sts., runs daily at 10.30 a.m. to Annapolis (fare 75 c.).

From Washington to *Baltimore*, see R. 27; to *Chicago*, see R. 49; to *Louisville*, see R. 90; to *New Orleans*, see R. 91; to *New York*, see R. 27; to *Richmond*, see R. 88.

From Washington to Mount Vernon. This trip, which should on no account be omitted, may be made either by steamer (15 M.) or by electric railway (16 M.; 1 hr.). The steamer, which descends the Potomac, starts daily from 7th St. Wharf (Pl. E, 5) at 10 a.m. and 2.30 p.m. (1.45 p.m. in winter), allowing 2 hrs. at Mt. Vernon, and regaining Washington at 2.15 and 6.15 p.m. (1.40 and 5.15 p.m. in winter; return-fare 75 c., incl. adm. to Mt. Vernon). It passes ($6^1/_2$ M.) *Alexandria* (see below; steam-ferry, see p. 211), *Fort Foote* ($8^1/_2$ M.), and (12 M.) *Fort Washington*. — The electric cars, starting hourly from 10 a.m. till 2 p.m. from the corner of Pennsylvania Ave. and 12th St. (Pl. D, 3; return-fare 75 c.), also pass ($7^1/_2$ M.) **Alexandria** (*Fleischmann Ho.*, $2, R. from $1), a quaint old Virginian city of 14,588 inhabitants. The objects of interest here (all easily seen in $^1/_2$ hr.; boy-guides demand 25 c. for each pers. but should be offered less for a party) include *Christchurch* (N. Columbus St.; adm. 10 c.), with the pews in which Washington and Gen. Robert Lee used to worship; the old *Carlyle House*, in Fairfax St. (reached through the Braddock House), the headquarters of Gen. Braddock in 1755 (in a very dilapidated condition; adm. 10 c.); and the so-called *Lord Fairfax House*, at the corner of Cameron and St. Asaph Sts., a fine example of the Colonial style. Col. Ellsworth, the first man to die in the Civil War, was killed in the *Marshall House*, at the corner of King and Pitt Sts. Adjoining the city is another *National Cemetery*, with 4000 graves. At (16 M.) the terminus of the electric railway is a refreshment room.

Mount Vernon, an old-fashioned wooden mansion, 96 ft. long, stands on a bluff, 200 ft. above the river, and commands a splendid view. The estate, originally named *Hunting Creek* and comprising 8000 acres, was inherited by George Washington in 1752 from his brother Lawrence, who had changed the name in honour of his former commander, Adm. Vernon of the British navy. The central part of the house was built by Lawrence, and the wings were added by George Washington. The house and 200 acres of land around it were bought by the *Mt. Vernon Ladies Association* in 1859 for $ 200,000 and have been restored as nearly as possible to their condition in George Washington's lifetime.

The house (adm. 25 c.; closed on Sun.) contains a number of interesting relics, of which, perhaps, the key of the Bastille is the most notable. The room in which Washington died is at the S. end of the first floor, and Mrs. Washington died in the one immediately above it. The room marked *Mrs. Washington's Sitting Room* was more probably *George Washington's Business Room.* The brick *Barn* is probably the oldest part of the buildings (1733). The *Coach House* contains Washington's carriage. The *Garden* contains trees planted by Washington, Jefferson, and Franklin. On the slope between the river and the house is the plain brick *Tomb of George Washington*, containing the sarcophagi of the General (1732-99) and his wife Martha (1730-1802). Near the Tomb are trees planted as memorials by Edward VII., Prince Henry of Prussia, and others.

29. From New York to Chicago.

a. Viâ Philadelphia and Pittsburg.

912 M. Pennsylvania Railroad in 18-28 hrs. (fare $ 20; sleeper $ 5). To the W. of Pittsburg we may go either viâ Crestline and Fort Wayne or viâ Columbus and Logansport (see R. 48). The 'Limited' and 'Special' trains on this route consist entirely of Pullman vestibuled cars and offer every imaginable comfort to the traveller. They are provided with a dining car, a library, a smoking and outlook car, a barber's shop, a bath, a ladies' maid, and a stenographer. An extra-fare of $ 10 (not including sleeper) is charged on the 'Pennsylvania Special', leaving New York at 4 p.m. and reaching Chicago at 8.55 a.m., while there are extra-fares of $ 3-5 on the other 'Limited trains'.

From New York to (90 M.) *Philadelphia*, see R. 16; from Philadelphia to (444 M.) *Pittsburg*, see R. 22; from Pittsburg to (912 M.) *Chicago* (Canal St. Station), see R. 48. The most beautiful part of the route is that between Philadelphia and Pittsburg.

b. Viâ Buffalo and Detroit.

Through-carriages are run on the following lines: —

(a.) 976 M. New York Central and Hudson River R. R. to (440 M.) *Buffalo* and Michigan Central R. R. thence to (976 M.) *Chicago* in 24-30 hrs. (fare $ 20; sleeper $ 5; excess fare on Limited trains from $ 1 to $ 10).

(b.) 954 M. West Shore Railroad to (429 M.) *Buffalo* and Wabash R. R. thence to (954 M.) *Chicago* in 27-29 hrs. (fare $ 18; sleeper $ 5; reclining chair cars free). Between *Suspension Bridge* and *Windsor* (see below) the line is operated jointly by the Grand Trunk and Wabash Railroads.

(a.) From New York to (440 M.) *Buffalo*, see R. 12 a; from Buffalo to (976 M.) *Chicago* (Illinois Central Station), see R. 50 c. This line affords a good view of *Niagara Falls* (see p. 358).

(b.) From New York to (429 M.) *Buffalo*, see R. 12 b. From Buffalo to (453 M.) *Suspension Bridge*, see R. 12 d. Beyond Suspension Bridge it is parallel with R. 50 c, passing (472 M.) *Welland*, (500 M.) *Canfield Junction*, (529 M.) *Simcoe*, (551 M.) *Tilsonburg*, (576 M.) *St. Thomas*, (603 M.) *Glencoe*, (637 M.) *Chatham*, and (683 M.) *Windsor* (p. 358). — 684 M. *Detroit*, see p. 358. Beyond Detroit the Wabash R. R. runs to the S.W. through a rich farming country. 743 M. *Adrian*, see p. 357; 780 M. *Montpelier*. The line now turns to the W. 804 M. *Ashley-Hudson;* 820 M. *Wolcottville;* 876 M. *North Liberty;* 900 M. *Westville;* 914 M. *Crocker;* 939 M. *Englewood* (p. 232). — 954 M. *Chicago* (Dearborn Station), see p. 366.

c. Viâ Buffalo and Port Huron.

981 M. Lehigh Valley Railroad to (464 M.) *Suspension Bridge* and Grand Trunk Railway thence to (981 M.) *Chicago* in 29 hrs. (fare $ 18; sleeper $ 5).

From *New York* to (464 M.) *Suspension Bridge*, see R. 12e; from Suspension Bridge to (981 M.) *Chicago* (Dearborn Station), see R. 50d.

d. Viâ Buffalo and Cleveland.

(a.) 980 M. New York Central Railroad to (440 M.) *Buffalo* and Lake Shore & Michigan Southern Railroad thence to (980 M.) *Chicago* in 18-30 hrs. (fare $ 20; sleeper $ 5). The best trains on this route resemble those of the Penna. R. R. (p. 229) and also charge extra fares (see R. 29b).

(b.) 952 M. West Shore Railroad to (429 M.) *Buffalo* and New York, Chicago, & St. Louis Railroad thence to (952 M.) *Chicago* in 28-29 hrs. (fare $ 18; sleeper $ 5).

(c.) 933 M. Delaware, Lackawanna, & Western Railroad to (410 M.) *Buffalo* and New York, Chicago, & St. Louis Railroad thence to (933 M.) *Chicago* in 28-30 hrs. (fare $ 18; sleeper $ 5).

(a.) From *New York* to (440 M.) *Buffalo*, see R. 12a; thence to (980 M.) *Chicago* (La Salle St. Station), see R. 50a. This line runs along the S. shore of Lake Erie.

(b.) From *New York* to (429 M.) *Buffalo*, see R. 12b; from Buffalo to (952 M.) *Chicago* (La Salle St. Station), see R. 50b.

(c.) From *New York* to (410 M.) *Buffalo*, see R. 12c; from Buffalo to (933 M.) *Chicago* (La Salle St. Station), see R. 50b.

e. Viâ Oswego and Suspension Bridge.

978 M. New York, Ontario, & Western Railway to (325 M.) *Oswego* in 12½ hrs.; New York Central & Hudson River R.R. thence to (476 M.) *Suspension Bridge* in 4¼ hrs.; Wabash R. R. thence to (978 M.) *Chicago* in 14 hrs. (in all, 29 hrs.; fare $ 18, sleeper $ 5, reclining chair car free). — The trains start from the West Shore Station at Weehawken (see p. 10).

From *Weehawken* (p. 73) to (53 M.) *Cornwall*, see R. 4c. Our line then diverges to the left (N.W.). 70 M. *Campbell Hall*, the junction of the Central New England R. R. (p. 88) and of the Wallkill Valley Line (for Lake Mohonk) to Kingston (p. 90). Beyond (80 M.) *Middletown* (p. 142) the country is hilly and picturesque. 95 M. *Summitville* (540 ft.), for (22 M.) Port Jervis (p. 143), for (7 M.) *Ellenville* (Mt. Meenagha Ho., 1500 ft. above the sea, 2 M. from the station), a summer-resort among the *Shawangunk Mts.* (p. 142), and (35 M.) Kingston (p. 90). We now skirt the S.W. side of the Catskills (p. 97) and begin to ascend the *Delaware Mts.* 103 M. *Mountain Dale* (960 ft.; Park Ho., from $ 2). — 120 M. **Liberty** (1580 ft.; *Liberty House*, *Lancashire Inn*, from $ 3; *Wawonda*, *Buckley*, *Mansion Ho.*, *Walnut Mountain Ho.*, *Monitor*, $ 2-3), a summer and winter health-resort, with the well-known *Loomis Sanitarium*, for cases of incipient consumption. It is a good centre for excursions. — At *Young's Gap* (1800 ft.) we reach the highest point of the line. 125 M. *Parksville* (1680 ft.); 135 M. *Roscoe* (1285 ft.), also the station for *Rockland*; 142 M. *Cook's Falls* (1185 ft.), on the *Beaverkill*.

From (150 M.) *East Branch* a branch-line runs to (37½ M.) *Arkville* (p. 104) and from (160 M.) *Cadosia* (1000 ft.) another runs to (54 M.) *Scranton* (p. 141). 167 M. *Apex* (1460 ft.). 180 M. *Walton* (1220 ft.), for a branch to (17 M.) *Delhi*. Farther on the line crosses the watershed between the Delaware and the Susquehanna. 190 M. *Franklin* (1200 ft.), amid the N.W. foot-hills of the Catskills; 197 M. *South Unadilla* (1300 ft.), the station for (1½ M.) *Unadilla* (p. 97). At (202 M.) *Sidney* (1000 ft.), on the *Susquehanna*, we intersect the Del. & Hudson line from Albany to Binghamton (see p. 96). 205 M. *New Berlin Junction*, for *Edmeston*, *Utica* (p. 131), and other points; 245 M. *Randallsville*, junction of a branch-line to (32 M.) *Utica* (p. 131). At (266 M.) *Castle* we intersect the West Shore R. R. (comp. p. 139). Beyond (267½ M.) *Oneida* (p. 132) we skirt the N. shore of *Lake Oneida*. 276 M. *Sylvan Beach* (St. Charles, from $2½). At (298 M.) *Central Square* we cross the R.W. & O. R. R. (see below).

325 M. **Oswego** (*Hotel Deep Rock*, $ 2-4) is a busy flour-making city and port, with (1905) 22,572 inhab., on *Lake Ontario*.

We now pass on to the Rome, Watertown, & Ogdensburg R. R., which skirts the S. shore of Lake Ontario. 363 M. *Wallington;* 393 M. *Windsor Beach*. From (394 M.) *Charlotte* a branch-line runs to (7 M.) *Rochester* (p. 135). 415 M. *Morton;* 471 M. *Lewiston*. — 476 M. *Suspension Bridge* (p. 139). Hence to (978 M.) *Chicago* (Dearborn Station), see R. 29b.

f. Viâ Salamanca and Marion.

998 M. Erie Railroad in 28-33 hrs. (fare $ 18; sleeper $ 5). The solid through-train leaves New York at 2.40 p.m.

From *New York* to (333 M.) *Hornell* (1160 ft.), see R. 12d. Our line here diverges to the left from the line to Buffalo (p. 144). 359 M. *Wellsville* (1525 ft.). At (384 M.) *Cuba* (1700 ft.) we pass the culminating point of the route and begin to descend. From (396 M.) *Olean* (1440 ft.) to *Buffalo*, see R. 19b. 409 M. *Carrollton*.

414 M. **Salamanca** (1385 ft.; *Keating*, *Dudley*, $ 2), with (1905) 5455 inhab., is the junction of a line to (43 M.) *Dunkirk* (p. 353). Central time here becomes the standard. — 447 M. **Jamestown** (1320 ft.; *Sherman Ho.*, *Humphrey Ho.*, $ 2-4), a city of (1905) 26,160 inhab., near the S. outlet of Lake Chautauqua (see below), and (453 M.) **Lakewood** (*Kent*, $ 4), at the S. end of the lake, are frequented as summer-resorts.

*Lake Chautauqua (1290 ft. above the sea; *20 ft. above Lake Erie) 18 M. long and 2 M. wide, is only 8 M. from Lake Erie, but empties its waters into the Gulf of Mexico through the Conewango, Allegheny, Ohio, and Mississippi. It is surrounded by low hills. Steamers ply regularly from *Jamestown* and *Lakewood* to *Bemus Point* (Pichard, $ 2), *Chautauqua* (p. 232), *Point Chautauqua* (several hotels), and *Mayville* (p. 201).

Chautauqua (*Hotel Athenæum*, 500 beds, $ 2½-4; numerous small hotels and boarding-houses), a pretty little place on the W. bank of the lake, is famous as the summer meeting-place (July & Aug.) of Chautauqua In-

stitution, a huge system of popular education, including public lectures, summer school classes, and home-reading circles, which has spread all over the United States since its foundation by Bishop Vincent and Lewis Miller in 1878. It has had about 250,000 members. The *National Home Reading Union* of England has been founded on the same model. The public buildings of Chautauqua include assembly-halls, lecture-rooms, club-houses, a museum, a gymnasium, and a model of Palestine, 300 ft. long. The Summer School has classes in language, literature, science, arts and crafts, physical education, and music, taught by upwards of 50 instructors from various American colleges and universities. The usual summer-recreations, such as boating, bathing, fishing, golf, and tennis, may all be enjoyed here. A so-called '*Citizen Tax*' is levied on all frequenters of the Chautauqua Summer Assembly (above twelve years of age): 40 c. per day, $ 1¾ per week, $ 6 per season. The tuition fees are $ 6 for one department, $ 11 for two, $ 12 for three. — The electric cars of the *Chautauqua Traction Co.* run from Jamestown along the S.W. shore to (3 M.) *Celoron Park* (the Coney Island of Lake Chautauqua), Lakewood, Chautauqua, and Mayville (p. 201).

About 15 M. beyond Jamestown we enter *Pennsylvania*. Beyond (474 M.) *Corry* (1430 ft.; p. 187) we descend the valley of *French Creek*. — 502 M. **Cambridge Springs** (1300 ft.; *Hotel Rider*, $ 2½-5, R. from $ 1½; *Riverside*, $ 2-3; *Bartlett*, $ 2-2½; *Kelly*, $ 2), an attractive health-resort with chalybeate and other medicinal springs and a golf-course. — 510 M. *Saegertown* (Saegertown Inn & Sanitorium, $ 2-3), on the *Kenarge*, with chalybeate and alkaline springs. 516 M. *Meadville* (1080 ft.; 10,290 inhab.), the junction for (36 M.) Oil City (p. 201), is the seat of Meadville Theological School (Unitarian), founded by H. J. Huidekoper in 1844, and of Allegheny College (Meth. Epis.; 400 students), founded in 1815. Near (559 M.) *Sharon* we enter *Ohio*. 572 M. *Youngstown* (Tod, $ 2½-3½), for Pittsburg (p. 197); 589 M. *Leavittsburg* (890 ft.), the junction of a line to (49 M.) *Cleveland* (p. 353); 610 M. *Ravenna*, an agricultural and industrial town, with 4000 inhab.; 627 M. *Akron* (1005 ft.), with 42,728 inhab. and manufactures of woollen, flour, and agricultural implements. At (693 M.) *Mansfield* (1155 ft.; see p. 349) we intersect the Pennsylvania and B. & O. railroads. 729 M. *Marion* (960 ft.), for (84 M.) *Dayton* (p. 404) and (143 M.) *Cincinnati* (p. 405); 826 M. *Decatur;* 857 M. *Huntington;* 914 M. *Monterey;* 979 M. *Hammond;* 993 M. *Englewood;* 994 M. *47th Street* (Chicago).

998 M. **Chicago** (Dearborn Station), see p. 366.

g. Viâ Baltimore and Washington.

1012 M. Baltimore & Ohio Railroad in 26 hrs. (fare $ 18; sleeper $ 5). The *Chicago Limited Train* (no extra fare) leaves New York at 8 a.m. and arrives in Chicago at 9.45 a.m. on the following day.

From *New York* to (90 M.) *Philadelphia*, see R. 16b; from Philadelphia to (186 M.) *Baltimore*, see R. 25; from Baltimore to (226 M.) *Washington*, see R. 27; from Washington viâ Pittsburg to (1012 M.) *Chicago* (Grand Central Station), see R. 49.

Another through-train from New York to Chicago runs from Washington viâ Bellaire (see p. 352) instead of viâ Pittsburg. The total distance by this route is 1046 M., and the time 29¼ hrs.

St. Albans
North Hero
Plattsburg
Burlington
Montpelier
St. Johnsbury
Lancaster
Mt. Washington
White Mts.
Adirondack Mts.
Elizabethtown
Middlebury
Rutland
Whitehall
Lake George
Saratoga Sprs.
Ballston
Amsterdam
Johnstown
Brattleboro
Keene
Bellows Falls
Hanover
Lebanon
Concord
Manchester
Portsmouth
Portland
Saco
Biddeford
Kennebunkport
Lewiston
Auburn
Farmington
Sebago Lake
Casco Bay
Lake Winnipiseogee
Laconia
Newport
Claremont
Woodstock
Springfield
Ludlow
Castleton
Ticonderoga
Port Henry
Keeseville
Saranac Lake
Tupper Lake
Lake Placid
Paul Smith's
Loon Lake
Bennington
Glastenbury
Londonderry
Manchester
Hoosick Falls
Greenwich
Schuylerville
Glens Falls
Ft. Edward
North Creek
Lake Pleasant
Northville
Hadley
Bridgton
N. Conway
Fryeburg
Gorham
Bethel
Norway
S. Paris
Canton
Rumford Falls
Rangeley L.
Mooselucmaguntic Lake
Umbagog Lake
N. Stratford
Littleton
Bethlehem
Plymouth
Franklin
Tilton
Dover
Rochester
Exeter
Epping
Salisbury
Amesbury
Hampton Beach
Isles of Shoals
York Beach
Kennebunk
Old Orchard
Camp Ellis
Saccarappa
Cumberland
Yarmouth
ATLANTIC
MAINE
NEW HAMPSHIRE
VERMONT
NEW YORK
Green Mts.
Lake Champlain
Connecticut
Merrimac
Hudson R.

Middleburgh
Rivena
Schoharie
Sharon Springs
Cobleskill
Lebanon Spgs.
Shelburne Falls
Miller's Falls
Greenfield
Fitchburg
Ayer
Wilmington
Danvers
Salem
Beverly
Oakfield
Marblehead
Nivarn
Williamsburgh
Coldbrook
Amherst
Concord
Acton
Lynn
Massachusetts
Ossackie
Chatham
Northampton
Marlboro
Framingham
Wellesley
BOSTON Bay
Catskill
Hudson
Stockbridge
Easthampton
Holyoke
Chicopee Falls
Brookfield
Spencer
WORCESTER
Milford
Dedham
Braintree
Saugerties
Boston Corners
Westfield
Springfield
Southbridge
Webster
Bellingham
Stoughton
Whitman
Provincetown
Race Point
Phoenicia
Silver Hts.
Pine Plains
Canaan
Sandisfield
Blackstone
Millbury
Bridgewater
Truro
Kingston
Rondout
Rhinecliff
Millerton
Simsbury
Windsor
Stafford
Putnam
Pascoag
Greene
Easton
Taunton
Plymouth
Cape Cod Bay
Stanfordville
Amenia
Tolland
Danielson
PROVIDENCE
Attia
Weir
Middleboro
New Paltz
Litchfield
Farmington
Hartford
Willimantic
Brooklyn
Warren
Myricks
Tremont
Poughkeepsie
Milton
Cloverdale
Plainville
Manch.
Hope
Somerset Jc.
Buzzard's Bay
Pine Bush
Watertown
Bristol
FALL RIVER
Barnstable
Harwich
Hopewell
Westfield
Turnerville
Plainfield Jc.
Greenwich
Harbor
Chatham
Montgomery
Newburgh
Towner
Colchester
Wickford
New Bedford
Monomoy Id.
Campbell Hall
Waterbury
Meriden
Middletown
Hope Valley
Falmouth
Middletown
Cornwall
Brewster
Kingston
Wood's Hole
Nantucket Sound
Goshen
Cold Spg.
Hawleyville
Stoning-ton
Narragansett Pier
Cottage City
Greycourt
Danbury
Bethel
Ansonia
New London
Martha's Vineyard
Newburgh
Mahopac
Ridgefield
Birmingham
NEW HAVEN
Watch Hill
Point Judith
Kauma
Muskeget Ch.
Nantucket Sta.
Greenwood Lake
Peekskill
Brookfield
Fenwick
Fisher's Id.
Nantucket
Buckberry Ridge
Goldens Bridge
Block Id.
No Man's Land
Sutherland
Spring Valley
Nanuet
Nyack
Norwalk
Bridgeport
Fairfield
Greenport
Shelter Id.
Gardiner's Id.
Montauk Pt.
Pompton
Orange Lake
Harrisville
Stamford
Montauk
Mahwah
Yonkers
Setauket
Sag Harbor
Easthampton
PATERSON
Hackensack
Passaic
Port Wash.
Northport
Bridgehampton
Southampton
NEW YORK
Flushing
Manor
Bassport
NEWARK
JERSEY CITY
Jamaica
Babylon
Bayshore
BROOKLYN
Great S. Beach
Long Beach
Long Beach Island
Fire Island
1 : 2.500.000
Statute Miles.
Kilometres.
West 72° from Greenw.
Wagner & Debes' Geogr. Estab. Leipzig

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30. From New York to Boston.

a. Viâ New Haven, Hartford, and Springfield.

234 M. Railway (*New York, New Haven, and Hartford Railroad* to Springfield; *Boston and Albany Railroad* thence to Boston) in 5½-7¾ hrs. (fare $ 4.65; sleeping-berth $ 1½-2, seat in drawing-room car $ 1); four through-trains daily, including one at night (11 p.m., arriving at 6.45 a.m.). Dining-car on the afternoon-trains (D. $ 1) and buffet-cars on other day-trains.

The train starts from the *Grand Central Station* (p. 10), runs through the long tunnels under Park Avenue (see p. 52), crosses the *Harlem River*, and traverses the somewhat unkempt environs of

New York. We have a glimpse of *Columbia University* (p. 67) to the left. To the right, at (9 M.) *Fordham*, are the large buildings of the Jesuit *St. John's College* and Poe's cottage (p. 74). A little farther on, also to the right, are the Botanical Gardens (p. 71), with their palm-house and museum. To the left lies *Woodlawn Cemetery* (with the large mausoleum of Jay Gould), and beyond (12 M.) *Woodlawn* our line diverges to the right from the N. Y. C. R. R. and skirts *Long Island Sound* (p. 247; not at first visible). — 14 M. *Mt. Vernon.* — 16½ M. *New Rochelle*, founded by Huguenot refugees in 1686. Thomas Paine (1737-1809) had a farm here, granted to him by New York State, and is commemorated by a monument. New Rochelle is also connected with New York by the 'Harlem River Branch' of the N. Y., N. H., & H. R. R. — 18½ M. *Larchmont*, a pretty seaside-resort and yachting station (comp. p. 23). — 24 M. *Rye*, the station for (2 M.) *Rye Beach* (Rye Beach, R. from $ 1), a summer-resort on the Sound. — Beyond (25½ M.) *Port Chester* we cross the *Byram River* and enter *New England.* — 28 M. **Greenwich** (*Kent Ho.*, from $ 5; *Silleck Ho.*, at Belle Haven, $ 2½-4; *Edgewood Inn*, 1½ M. from the station, from $ 5; *Held Ho.*, $ 3, at Indian Harbor, ¾ M. to the S.E.), the first station in *Connecticut* (pron. Connéticut; the 'Nutmeg State'), is a town with 12,271 inhab., pleasantly situated on heights overlooking Long Island Sound. It was settled in 1640 and contains the villas of many New Yorkers. The *Putnam Cottage*, the headquarters of Gen. Putnam in 1778-79, contains a few relics.

33½ M. **Stamford** (*Rockland*, $ 2-2½; *Shippan Point Ho.*, finely situated on Shippan Point, 1¾ M. to the S., $ 3), with 15,997 inhab., is a town of the same age as Greenwich and is also a favourite residence and summer-resort of New York merchants (steamer to New York 35c.). — 41½ M. *South Norwalk* (Mahackemo, $ 2-2½) is the station for (1½ M.; tramway) *Norwalk* (Norwalk Hotel, $ 2-2½; pop. 6125), another summer-resort, and the junction of a branch-line to Danbury (p. 336). — 51 M. *Fairfield* has a good bathing-beach.

56 M. **Bridgeport** (*Atlantic House*, from $ 2½-3; *Windsor*, from $ 2, R. from $ 1), a flourishing city of (1900) 70,996 inhab., lies on an inlet of the Sound, at the mouth of the *Pequonnock River.* It possesses important manufactures of sewing-machines (Wheeler & Wilson, Howe), small-arms, ammunition, carriages, and other articles (total value in 1900, $ 38,000,000). The winter-quarters of Barnum & Bailey's Circus (now Ringling Bros.) are at Bridgeport. *Golden Hill*, above the town, with numerous villas, affords good views; and *Seaside Park* contains a Soldiers' & Sailors' Monument and statues of Elias Howe and P. T. Barnum. Bridgeport is the junction of the Berkshire Division of the N. Y., N. H., & H. R. R. (R. 45). Steamers daily to New York (50 c.). — Farther on the train crosses salt-marshes and reaches —

73 M. **New Haven.** — New Haven House Hotel (Pl. a; C, 2), $ 4; Tontine (Pl. b; D, 2), R. from $ 1; Garde (Pl. c; D, 3, 4), near the station, commercial, $ 2-3½; Davenport (Pl. d; D, 2), from $ 2, R. from $ 1. — *Railway Restaurant.* — Cab 50 c. per drive, 2 pers. 35 c. each. — *Post Office* (Pl. D, 2), Church St.

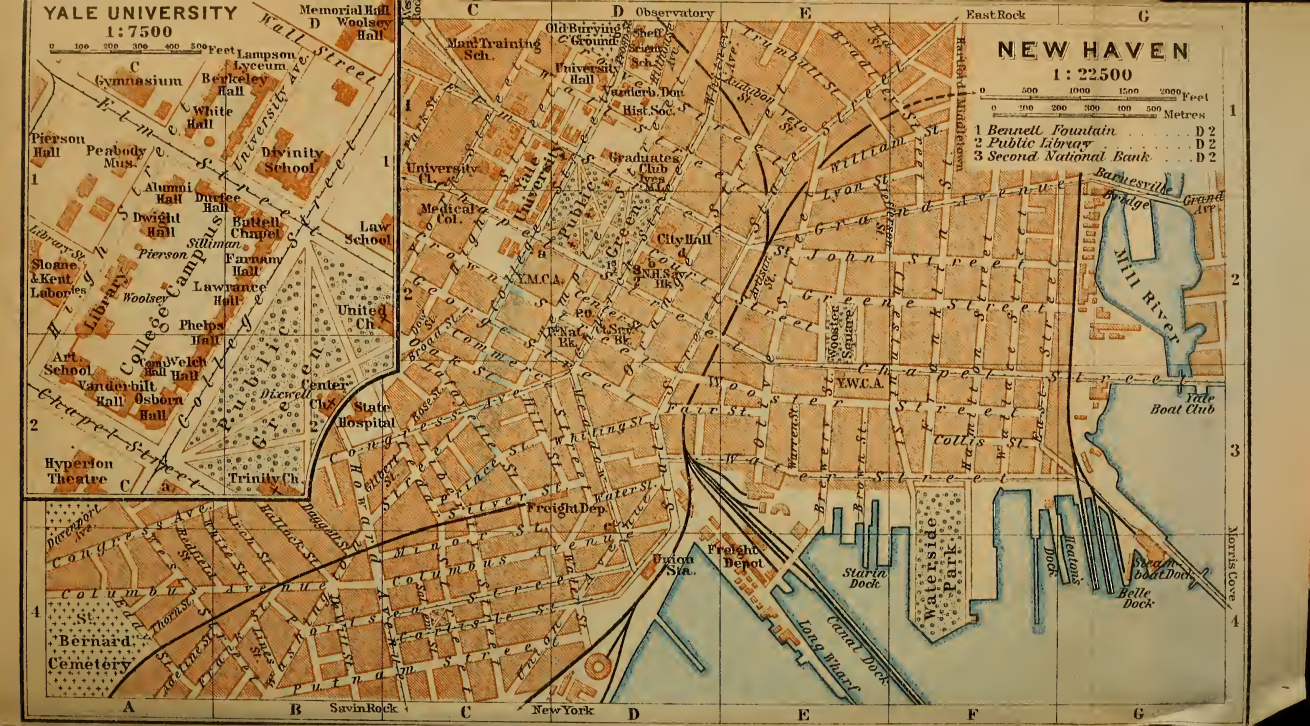
New Haven, the largest city of Connecticut and seat of Yale University, is a well-built city, situated at the head of a bay of (4 M.) Long Island Sound and surrounded by hills. It is known as the 'City of Elms', from the fine trees which shade its streets, and carries on a considerable trade and numerous manufactures (value in 1900, $ 41,000,000). The town was founded in 1638. In 1800 it had 4049 inhab., and in 1900 it had 108,027.

From the large *Union Station* (Pl. D, 4), which adjoins the *Harbour*, Meadow Street (electric tramway) leads to the N. to (½ M.) the *Public Green (Pl. C, D, 1, 2), on which are the *City Hall*, three *Churches*, the *Second National Bank* (Pl. 3), and the *Free Public Library* (Pl. 2). At the back of *Center Church* is a monument to *John Dixwell*, the regicide. At the S.E. corner of the Green is the *Bennett Fountain* (Pl. 1; 1907), designed by John F. Weir after the Monument of Lysicrates at Athens.

In College St. are most of the substantial buildings of *Yale University (Pl. C, D, 1, 2), which is second in importance to Harvard alone among the universities of America. Besides the Academic Department, it has schools of Science, Theology, Medicine, Law, Forestry, Music, and Fine Arts, and also a Graduate School.

Yale University (390 instructors and 3300 students) was founded at Killingworth in 1700 and established at New Haven in 1717. It was named in honour of *Elihu Yale* (1648-1721), a native of New Haven, who became Governor of Madras and of the East India Co. He presented it with 400*l*. Perhaps the most eminent of its Presidents were *Timothy Dwight* (1795-1817) and *Theodore D. Woolsey* (1846-71), and the list of its alumni includes Eli Whitney (p. 607), Sam. F. B. Morse (p. 274), Jonathan Edwards (p. 339), Noah Webster, Theo. Winthrop (author of 'Cecil Dreeme'), Chancellor Kent, John C. Calhoun (p. 604), Horace Bushnell, James D. Dana, Ben. Silliman, N. P. Willis, etc.

From the Public Green we enter the university 'campus' or quadrangle by an imposing tower-gateway known as *Phelps Hall*, where a guide may be secured. Among the buildings in the campus are the **Art School* (adm. 25 c.), containing a good collection of Italian, American (historical works by Trumbull, West, etc.; open free daily & on Sun. afternoon), and other paintings and sculptures; *Connecticut Hall*, the oldest Yale building (1750); *Osborn Hall; Battell Chapel; Vanderbilt Hall; Alumni Hall; Dwight Hall;* and the *College Library*, containing 500,000 vols., including those left by Bp. Berkeley and MS. works of Jonathan Edwards. The campus also contains statues of the *Rev. Abraham Pierson*, first Rector of Yale (1645-1708), *President Woolsey* (1801-89), and *Prof. Silliman* (1779-1864). At the corner of Elm and High Sts. is the **Peabody Museum of Natural History* (Pl. C, 1; open as above), in which the mineralogical collections are especially fine.


YALE UNIVERSITY
1:7500
0 100 200 300 400 500 Feet
NEW HAVEN
1 : 22500
0 500 1000 1500 2000 Feet
0 100 200 300 400 500 Metres
1 Bennett Fountain . . . . . D 2
2 Public Library . . . . . D 2
3 Second National Bank . . . D 2
Memorial Hall
Woolsey Hall
Lampson Lyceum
Gymnasium
Berkeley Hall
White Hall
Pierson Hall
Peabody Mus.
Divinity School
Alumni Hall
Durfee Hall
Dwight Hall
Battell Chapel
Law School
Sloane & Kent Laboratories
Library
Farnam Hall
Lawrence Hall
Phelps Hall
United Ch.
Art. School
Welch Hall
Vanderbilt Hall
Osborn Hall
Center Ch.
State Hospital
Hyperion Theatre
Trinity Ch.
Wall Street
Elm Street
University Ave.
High Street
Library St.
Chapel Street
College Campus
Public Green
Observatory
East Rock
Hartford Middletown
Man. Training Sch.
Old Burying Ground
University Hall
Vanderb. Dor.
Hist. Soc.
Graduates Club
University Cl.
Medical Col.
Yale University
Public Green
City Hall
Y.M.C.A.
Y.W.C.A.
Wooster Square
Chapel Street
Wooster Street
Fair St.
Water Street
Collis St.
Trumbull St.
Bradley St.
William St.
Lyon St.
Grand Avenue
St. John Street
Greene Street
Chestnut St.
Frankl St.
Hamilton St.
Wallace St.
East St.
Barnesville Bridge
Grand Ave.
Mill River
Yale Boat Club
Freight Dep.
Union Sta.
Freight Depot
Starin Dock
Waterside Park
Heaton's Dock
Steamboat Dock
Belle Dock
Canal Dock
Long Wharf
Morris Cove
Savin Rock
New York
St. Bernard Cemetery
Congress Ave.
Columbus Avenue
Minor St.
Silver St.
Howard Ave.
Putnam Street
Dixwell
Whiting St.
Water St.
Hill St.
Prince St.
Lafayette St.
Congress Ave.
Broad St.
Oak St.
Commerce Street
Temple Street
Church Street
Court Street
Orange Street
Grove Street
Wall Street
Park St.
Elm Street
Trumbull St.
Audubon St.
Veto St.
Bradley St.
Hillhouse Ave.
Whitney Ave.
Artisan St.
Jefferson St.
Brewery St.
Brown St.
Warren St.
Hamilton St.
Wallace St.
Eastern St.
Davenport Ave.
Bedfield St.
White St.
Arch St.
Hallock St.
Daggett St.
Thorn St.
Adeline St.
Frank St.
Lines St.
Washington St.
Carlisle St.
Union St.
Salem St.
Dow St.
Rose St.
Gilbert St.
Cedar St.
Liberty St.
Meadow St.
Hill St.
Prince St.
Silver St.
Water St.
Dixwell
Center St.
Ct. Sq. Bk.
Nat. Bk.
P.O.
N.H. Sav. Bk.
Y.M.C.A.
Y.W.C.A.
A B C D E F G
1 2 3 4

EAST BOSTON

which the mineralogical collections are especially fine.

The other chief buildings of the University include the *Sheffield Scientific School* (Pl. D, 1), consisting of half-a-dozen admirably equipped buildings between Prospect St. and Hillhouse Ave.; the *Gymnasium* (Pl. C, 1), in Elm St.; the *Divinity School* (Pl. D, 1), at the corner of Elm and College Sts.; the *Observatory* (Prospect St.; beyond Pl. D, 1); the *Chemical* and *Physical Laboratories* (Sloane & Kent; Pl. C, 1); the *Medical College* (Pl. C, 2; York St.); the *Law School* (Pl. D, 1); the *Vanderbilt Dormitories* (Pl. D, 1); *Woodbridge Hall* (administrative building); *University Hall* (dining hall); *Woolsey Hall* (with large organ); and *Memorial Hall*, these three at the cor. of Grove and College Sts. (Pl. D, 1). The buildings of the *Graduates Club* (Pl. D, 1), the *University Club* (Pl. C, 1), and the *Historical Society* (Pl. D, 1) may also be mentioned. University dramatic performances are given in the *Hyperion Theatre* (Pl. C, 2).

The *Old Burying Ground (Pl. D, 1), in Grove St., at the head of High St., contains the graves of *Sam. Morse* (1791-1872), *Noah Webster* (1758-1843), *President Timothy Dwight* (1752-1817), *Theo. Winthrop* (1828-61), and *Eli Whitney* (1765-1825). — To the N. from Grove St. runs Hillhouse Avenue (Pl. D, 1), the most beautiful street of New Haven. It ends at what was once *Sachem's Wood*.

Environs. **East** and **West Rocks** are two masses of trap-rock on the plain near the city. The *East Rock* (360 ft.), 2 M. from the Green (tramway viâ State St.) has been made a public park and is surmounted by a war-monument (restaurant; *View). The *West Rock* (400 ft.), 2¼ M. to the N.W. of the Green (tramway through Elm St. and Whalley Ave.), ascended with more difficulty, is also a good point of view. Goffe and Whalley, two of the regicides, lay concealed here in the *Judge's Cave*. At *Edgewood*, near the foot of the West Rock, was the home of Donald G. Mitchell ('Ik Marvel'; d. 1908). — **Savin Rock** (*Sea-View Ho.*, $ 2; 2½) is a bold promontory, commanding a view of Long Island Sound (p. 247; tramway from the Green). — Other favourite resorts (tramway) are *Morris Cove* and (¾ hr.) *Momauguin* (sea-bathing and shore-dinners). — A Steamer plies twice daily from New Haven to *New York* in 5 hrs. ($ 1, return-fare $ 1.25, stateroom $ 1).

From New Haven to Middletown, 24 M., railway in ¾-1 hr. (fare 60 c.). — This line runs to the E. of the main route described below.

24 M. **Middletown** (*McDonough*, $ 2), the junction of the line from Saybrook to Hartford, is a busy town of 9589 inhab., on the *Connecticut River*. It is the seat of *Wesleyan University*, founded in 1831 (320 students; *View from the chapel-tower; good library, with 76,000 vols. and collections of natural history), the *Berkley Divinity School* (Episcopal), and the *State Insane Asylum*. — Middletown is also connected by railway with *Hartford* (see below) and *Willimantic* (p. 246; fare 75 c.).

Beyond New Haven the train turns to the left and runs inland (N.). To the left are the *East* and *West Rocks* (see above). The line follows the *Quinnipiac* valley. — 92 M. *Meriden* (Winthrop, $ 2½-4), a town of 28,695 inhab., with important manufactures of silverware (International Silver Co.), cutlery, tinware, and other goods. To the N.W. of the city is **Hubbard Park*, a striking reservation of natural scenery at the foot of the geologically interesting *Hanging Hill* (*West Peak*, 1007 ft.; view). At *West Meriden* is a large State Reform School for boys (founded in 1854). — 99 M. *Berlin*, another tinware-making place; 105 M. *Newington* (p. 239).

110 M. **Hartford** (**Heublein*, R. from $ 1½; **Allyn House*, $ 3½-5, R. from $ 1½; *Hartford*, $ 2½-4, R. from $ 1; *The Garde*, $ 2½-5, R. from $ 1; *New Dom*, from $ 2½, R. from $ 1; *Rail. Restaurant*; cab 75 c. for 1-2 pers.), the capital of *Connecticut*, is

finely situated on the navigable *Connecticut River*, at its confluence with the *Park River*, 50 M. from Long Island Sound. It contains manufactories of steam-engines, small-arms (Colt's Factory), bicycles and automobiles (Pope Manufacturing Co.), etc., and is noted for its powerful insurance companies (assets $ 300,000,000) and for one of the largest savings banks in the United States (deposits at beginning of 1908, $ 31,000,000). A Dutch fort was established here in 1633, and the town was founded three years later. Many of its founders came from Hertford, England. Its population is (1900) 79,850. — The *Union Depot* is near the centre of the town. To the S.W. of it, beyond the *Park River*, lies **Bushnell Park*, containing the handsome white marble *Capitol, a conspicuous object in most views of the town. The fine sculptural embellishment of the N. façade was done under the supervision of Paul W. Bartlett and partly by his own hand. The *Senate Chamber* contains a good portrait of Washington, by Stuart, and an elaborately carved chair, made from the wood of the 'Charter Oak' (see below). In the Library are the Charter of Connecticut (see below) and portraits of Connecticut Governors, many of them by Chas. Noel Flagg. In the E. wing of the groundfloor is a statue of *Nathan Hale* (p. 38), and in the W. wing are the tombstone of *Gen. Putnam* (p. 282) and a statue of *Governor Buckingham* (1858-66), by Olin Warner. The *Statue of Gen. Putnam*, in the grounds, is by J. Q. A. Ward. Fine view from the *Dome* (250 ft.). The gateway to the park, erected as a *Soldiers' Memorial*, deserves attention. — Following Capitol Avenue to the E. and then turning to the left, along *Main Street*, we reach (right) the Wadsworth Athenæum, containing a gallery and libraries with 150,000 vols., and the collections of the *Historical Society* (9-4). Adjacent are the buildings of the *Etna Life Insurance*, the *Etna Fire Insurance*, and the *Travelers Insurance Co.* A little farther on is the *Post Office*, adjoined by the interesting *Old State House*, erected by Chas. Bulfinch (p. 260). Opposite is the *Connecticut Mutual Life Insurance Co.* By continuing to follow Main St. in the same direction, we reach (20 min.) the *State Arsenal*.

Near the State House are the *High School*, the *Hartford Orphan Asylum*, and the *Hartford Theological Institute*. — About 1 M. to the S. is *Trinity College*, an E.E. building by Burges of London. — The *Colt Firearms Factory* is in the S.E. part of the city, and near it is the handsome **Church of the Good Shepherd*, erected in memory of Col. Colt, inventor of the revolver, by his wife.

A tablet at the corner of *Charter Oak Place* marks the site of the 'Charter Oak', where in 1687 a colonial gentleman hid the charter of Connecticut (see above), to save it from Sir Edmund Andros (p. 32). *Charter Oak Park* is famous for its trotting races. *Elizabeth Park* has a fine show of flowers. — Among other large buildings are the *Retreat for the Insane*, the *Deaf and Dumb Asylum*, the *Old Folks Home*, the *City Hospital*, and **St. Joseph's R. C. Cathedral.*

The last is in Farmington Avenue, which, with its continuation Asylum Street, contains many fine private residences.

Among past and present residents of Hartford are *Mr. S. L. Clemens* ('Mark Twain'; b. 1835), *Charles Dudley Warner* (1829-1900), *Mrs. Harriet Beecher Stowe* (1812-96; comp. pp. 289, 336), and *Mrs. Sigourney* (d. 1865). — Pleasant *Drives* may be taken in the vicinity (*Talcott Mt.*, *Tumbledown Brook*, the *Keney Park*, one of the finest wild parks in New England, etc.). — *Steamers* ply daily to *New York* ($ 1¾), *Sag Harbor* (p. 81), etc. — An *Electric Tramway* connects Hartford with (17 M.) *Rockville* (20 c.). — Another line runs to (9 M.) *Farmington* (15 c.), a quaint old village with a country-club and a famous school for girls, established by Miss Porter about 1845.

From Hartford to Fishkill Landing, 111 M., *N. Y., N. H., & H. Railroad* in 4½ hrs. — 5 M. *Newington* (p. 237). — 9 M. *New Britain* (Russwin, from $ 2½), the birthplace of Elihu Burritt (1810-79), the 'Learned Blacksmith', a busy town with 25,998 inhab., engaged in making locks, jewellery, and hardware. A monument to Burritt, who knew 50 languages and was active in many good causes, is to be erected here. — 14 M. *Plainville.* — 33 M. Waterbury (*Elton*, from $ 3, R. from $ 1½; *Connecticut*, $ 2½-3), a manufacturing town with 45,859 inhab. and the junction of the Naugatuck R. R., is well known for its watches, of which about 600,000 are turned out here yearly by the New England Watch Co. — 57 M. *Hawleyville;* 63 M. *Danbury* (p. 336); 73 M. *Brewster* (p. 74). The line now turns to the N. 98 M. *Hopewell Junction;* 104 M. *Fishkill.* — 111 M. *Fishkill Landing*, see p. 87.

Beyond Hartford (Capitol seen to the right) we cross the Connecticut by a fine stone bridge of nine spans, 1192 ft. in length (1908). A good deal of tobacco is grown in this part of the valley. Between (127 M.) *Thompsonville* and (132 M.) *Longmeadow* we enter *Massachusetts* (the 'Bay State').

136 M. **Springfield** *(The Worthy*, R. from $ 1; *Massasoit House*, $ 3-5, R. from $ 1, rooms towards railway to be avoided; *Cooley's*, $ 2½-4, R. $ 1-3; *Haynes Hotel*, from $ 2½; *Railway Restaurant)*, a thriving city on the E. bank of the Connecticut, dating from 1636, carries on a great variety of industries, the most important of which is the manufacture of small-arms. Pop. (1905) 73,540. The United States Armoury, in a park to the E. of the station (reached viâ State St.), employs about 1300 hands and can turn out 120,000 Springfield rifles annually (apply at office for a pass; no adm. on Sun.). View from tower. The *Arsenal* contains 225,000 stand of arms. During the Civil War 800,000 guns were made here. The **Art Museum* (open free daily, 1-5 in winter, 2-6 in summer), a fine Renaissance building, contains the George W. V. Smith Collection of European and Oriental Art (ceramics, bronzes, rugs, carved ivories, lacquer-work, lace, armour, etc.) and the Horace Smith Hall of Sculpture. The *Science Museum* (open as above) contains a scientific library and collections of natural history. Among the principal buildings are the **Church of the Unity*, *North Church* (these two by H. H. Richardson), *Christ Church*, the *Memorial Church* (N. end of city), *South Church*, the *Church of the Sacred Heart*, the *Wesson Mansion*, the *Court House*, the *Railway Station* (these two designed by H. H. Richardson), the *County Hall of Records*, and the *City Library* (155,000 vols.). A visit may also be

paid to **Forest Park* (S.; ponds covered with lotus-plants), *Merrick Park* (adjoining the Public Library and containing the *Puritan, a statue by Saint-Gaudens), and the two *Cemeteries*. Good views are obtained from *Crescent Hill Road* (S.) and from the bridges.

The reputation of the *Central High School* and the other public schools of Springfield attracts many educational experts. — The 'Springfield Republican' is one of the best newspapers in the country, and the famous 'Webster's Dictionary' is published here.

At Springfield we join the Boston and Albany R. R. (p. 334) and turn to the E. (r.). 151 M. *Palmer* (Rail. Restaurant; p. 243).

190 M. Worcester. — Bay State Hotel, R. from $ 1; Standish, $ 2½-5; New Park, $ 2½-3; Warren, $ 2½-3, R. from $ 1; Lincoln, from $ 2½, R. from $ 1. — *State Mutual Restaurant*, at the top of the State Mutual Building, Main St. (view); *Rail. Restaurant*. — *Cab* 50 c. for each person. — *Tramways* 5 c.

Worcester the second city of Massachusetts and 'heart of the Commonwealth', with (1905) 128,135 inhab., occupies a hill-girt site near the *Blackstone River*. It was founded in 1673. Its manufactures are very varied, the staples being iron, copper, and steel wire, looms, carpets, machinery, envelopes, elevators, organs, and pianos (total annual value $ 55,000,000).

From the *Union Depot*, by Ware and Van Brunt, we proceed to the W. through Front St. to (5 min.) the Common, which contains a *War Monument* and a *Memorial of Col. Timothy Bigelow*.

On the W. side of the Common rises the City Hall, a building of white marble, in front of which is a bronze statue of *Senator Hoar* (1826-1904), by French. The City Hall faces Main Street, which we follow towards the right, to Lincoln Square. Just short of the square, to the left, stands the *Court House*, with a statue of *Gen. Devens* (1820-91), by French, in front of it. Adjacent is the *American Antiquarian Society (open 9-5, except Sat. afternoon).

This society, one of the leading learned bodies of America, was founded in 1812 by Isaiah Thomas and possesses a valuable library of 115,000 vols. (esp. rich on American subjects). The collection of newspapers (over 5000 vols.) extends from the *Boston News Letter* of 1704 down to the present day.

In Lincoln Sq. stands the old *Salisbury House*, an interesting specimen of a Colonial mansion. In Salisbury St., continuing Main St. towards the N., we pass the *Society of Antiquity* and the *Woman's Club* (l.), bend to the left opposite the *State Armoury*, and reach the *Worcester Art Museum, erected in 1898 and richly endowed by Stephen Salisbury (2-6; adm. 25 c., free on Sat. & Sun.; closed on Mon.). Among its permanent contents are a good collection of casts, valuable paintings (examples of Herrera, Copley, Van Goyen, Raeburn, Gilbert Stuart, Moreelse, Inness, etc.) and engravings, and the Bancroft Japanese Collection. Loan Exhibitions are held. — Beyond the Museum is the *Polytechnic Institute*. To the right lies *Institute Park*.

The old *Bancroft House*, in which George Bancroft (1800-1891), the historian, was born, stood in Salisbury St., 1 M. from the square, and its site is marked by a tablet. About ¼ M. to the left is *Bancroft Hill* (720 ft.),

laid out as a public park. *Highland Street* leads to the W. from Lincoln Sq. to *Elm Park* and (1 M.) *Newton Hill* (670 ft.), which commands an extensive *View. — In Grove St., to the E. of Institute Park, are the huge *Wire Works of the American Steel & Wire Co.* (interesting processes). — *Belmont St.* leads to the E., between *Millstone Hill* and *Bell Pond*, to (1½ M.) the State Insane Hospital (1500 patients; *View).

Following Main St. to the left (S.) from the Common, we pass the *Post Office* (left) and several churches and reach (1½ M.; to the right) the Clark University, opened in 1887 for research work (85 students), and *Clark College* (115 students). — About ½ M. farther on is Webster Square.

From this point *Electric Tramways* run to *Southbridge*, to (6 M.) *Leicester* (Leicester Inn, from $ 2½), and to (12 M.) *Spencer* (Massasoit, $ 2), connecting with a line to Springfield (p. 239). — A pleasant walk of 2 M. may be taken round *Coes Pond*, to the W. of Webster Square.

Among other buildings of interest are the *Free Public Library* (165,000 vols.), Elm St.; the three *High Schools;* the *Natural History Society's Museum*, Harvard St. (9-5); the *State Normal School; Worcester Academy*, Providence St.; the *Highland Military Academy;* and the *College of the Holy Cross* (R. C.), commandingly situated on *Mt. St. James* (690 ft.), to the S. of the town.

Among the pleasantest excursions from Worcester is that to *Lake Quinsigamond, a popular resort 2 M. to the E., reached by electric railway. — Not far from the N. end of this lake lies *Shrewsbury*, a pleasant little town with (1905) 1866 inhab. and the Jubal Howe Memorial Library.

Beyond Worcester the train makes an abrupt turn to the right (S.) and passes *Lake Quinsigamond* (left; comp. above). — 213 M. **South Framingham** (*Kendall, Winthrop,* $ 2-3; pop. 11,000), a manufacturing place and junction of several railways, with a well-managed *Reformatory for Women.*

The railway to (29 M.) Lowell (p. 312) passes (7 M.) *Sudbury*, near which is an old Colonial tavern, the original of Longfellow's 'Wayside Inn'. It contains some interesting rooms and furniture, but a charge of 25 c. for admission is made to each person not ordering a meal.

Cochituate Lake, to the left, near (217 M.) *Natick* (9609 inhab. in 1905), is one of the sources of Boston's water-supply. [From this point on, comp. the Map at p. 274.] To the right of (220 M.) *Wellesley* (Wellesley Inn, $ 2-2½) are the buildings of **Wellesley College*, one of the best-known colleges for women in the United States, founded in 1875 and situated in a beautiful park (1200 students). — 224 M. *Auburndale* (Woodland Park Hotel); 225 M. *West Newton;* 227 M. *Newtonville;* 228 M. *Newton*, all included in the wealthy suburban city of *Newton* (36,827 inhab. in 1905). 230 M. *Brighton*, with a large cattle-market and slaughter-houses. To the left is the *Charles River.* The train then skirts the N. end of *Brookline* (p. 274; stat. *Cottage Farm*), affording a good view (left) of the Charles River, Cambridge, Boston (with the gilded dome of the State House), and Charlestown Heights (p. 273). In entering Boston we pass over the 'Back Bay' (p. 268), with *The Fens* to the right. 233 M. *Huntington Avenue Station* (p. 253).

234 M. *Boston* (South Union Station), see R. 31.

b. Viâ Providence and the Shore Line.

232 M. N. Y. N. H. & H. Railroad in 5-7 hrs. (fares, etc., as at p. 234). The best trains by this route are the 'Bay State Limited' (10 a.m.), the 'Knickerbocker Limited' (1 p.m.), and the 'Merchants Limited' (5 p.m.; inclusive fare on these $ 5.65). — Vestibuled trains with through-carriages run on this route between Boston and Washington in 13-14 hrs., the train being carried between Harlem River and Jersey City (see p. 73) by steamboat (D. on steamer $ 1).

From New York to (73 M.) *New Haven*, see p. 234. The 'Shore Line Division' of the N. Y. N. H. & H. R. R. crosses the *Quinnipiac* and continues to follow the shore of *Long Island Sound*, of which it affords fine views. Beyond (77 M.) *Fair Haven* we pass through cuttings and two tunnels. 82 M. *Branford* (Montowese, Branford Point Ho., Double Beach Ho., from $ 2½), with the handsome Branford Library, and (85 M.) *Stony Creek* (Brainard Ho., $ 1½-2) are popular bathing resorts. — 89 M. *Guilford* (Guilford Point Ho., Halleck, $ 2) was the birthplace of the poet Fitz-Greene Halleck (1790-1867). — At (105 M.) *Saybrook* (Coulter Ho., Pease Ho., $ 2), near the mouth of the *Connecticut River*, we intersect the Conn. Valley Division, which begins at *Fenwick* (Fenwick Hall, $ 4), 2 M. to the S., and runs to Middletown, etc. (see p. 237). Beyond Saybrook we cross the wide Connecticut. — 108 M. *Lyme* (*Old Lyme Inn, $ 2-3), a charming little resort of artists, with old Colonial houses.

124 M. **New London** (*Crocker House*, *Mohican*, $ 2½-4; **The Griswold*, across the river, from $ 5, open in summer only), a small city on the right bank of the *Thames*, with 17,548 inhab. and a good harbour, defended by *Fort Trumbull* (seen from the station) and *Fort Griswold* (on the other side of the river). There is a *Soldiers' & Sailors' Monument* in front of the station; and a *Statue of John Winthrop*, Governor of Connecticut in 1557-76, was erected in 1905. Just above the town is a small *U. S. Navy Yard*. Whaling and sealing are carried on, on a diminished scale. The Yale and Harvard boat-race is decided here in June, and several other colleges have boat-houses on the Thames. The *Public Library* is handsome.

The *Obelisk* (134 ft. high), which stands out so prominently on the *Groton Heights*, on the E. bank of the river (ferry 4c.), was erected to commemorate the burning of the town by Arnold and the massacre of Fort Griswold on Sept. 6th, 1781 (*View from the top; adm. 10 c.). Adjoining The Griswold (see above) are the *Shenecossett Golf Links*. — Steamers also ply from New London to *White Beach*, Newport (p. 248), Block Island (see below), Norwich (p. 247), Fisher's Island (see below), Shelter Island (p. 80), Sag Harbor (p. 81), New York ($ 1½-2½), etc.

Block Island (*Ocean View*, $ 3½-5; *Spring Ho.*, $ 3½; *Manisses*, *National*, $ 2½-3½; *New Adrian*, $ 2½-3; *Hygeia*, $ 2-3, etc.), an island 8 M. long and 2-4 M. broad, situated 10 M. from the coast of Rhode Island, is a much-frequented summer-resort (mean summer temp. 73°). It is also reached by steamer from New York direct and from Providence and Newport (comp. p. 248). — **Fisher's Island** (*Munnatawket Hotel*, *Mansion House*, $ 4; *Mononotto Inn*, $ 3½) is a long narrow island, close to the shore, frequented for bathing and fishing.

From New London to Brattleboro, 121 M., *New London Northern R.R.* (a branch of the Central Vermont R.R.) in 5 hrs. — 13 M. *Norwich*, see p. 247; 50 M. *Willimantic* (p. 246); 65 M. *Palmer* (p. 240). — 85 M. Amherst (*Amherst Ho.*, from $ 2½), with (1905) 5313 inhab., is chiefly interesting as the site of Amherst College, one of the leading educational institutions of New England (founded in 1821; 510 students). Among the chief buildings of the college are the *Memorial Chapel*, *Walker Hall*, the *Library* (90,000 vols.), the *Observatory*, the *Chemical* and *Physical Laboratories*, *Appleton Cabinet*, and the *Gymnasium*. Its collections of Assyrian sculptures, minerals, casts, meteorites, and prehistoric tracks of animals in stone are of great importance. Amherst is also the seat of the *Massachusetts Agricultural College*. Amherst was the home of the poetess *Emily Dickinson* (1830-86). — 100 M. *Miller's Falls* (p. 335); 109 M. *Northfield* (The Northfield, $ 3), the home of the evangelist Dwight L. Moody (d. 1899), with permanent schools and annual religious conferences; 111 M. *South Vernon* (p. 345). — 121 M. *Brattleboro*, see p. 345.

We now cross the Thames, by a huge swing-bridge (view), to (127 M.) *Groton* (see p. 242). — From (138 M.) *Stonington* (Columbia, $ 2), a quiet town with 8540 inhab., steamers ply daily to (4 M.) *Watch Hill*.

Watch Hill (*Watch Hill Ho.*, *Ocean*, $ 4; *Plympton*, *Atlantic*, *Columbia*, $ 2½-3½) is a sea-bathing place at the S.W. extremity of Rhode Island (comp. below), commanding fine views.

Beyond Stonington the train enters *Rhode Island*, the smallest state in the Union ('Little Rhody'; 50 M. by 20 M.), but first in the proportion of manufactures to population. We cross the *Pawcatuck* and reach (144 M.) *Westerly* (Dixon Ho., $ 2½-3), whence an electric tramway runs to *Watch Hill* (see above). Between (155 M.) *Carolina* and Kingston the train passes through the famous *Great* or *Cedar Swamp (Narragansett Fort)*, where King Philip and his Indians were almost annihilated in Dec., 1675. — 161 M. *Kingston* (Rail. Restaurant), the junction of a line to (9 M.) *Narragansett Pier*.

Narragansett Pier (*Imperial*, $ 4-8; *Gladstone*, *New Matthewson*, *Green's Inn*, $ 4-6; *Atlantic*, *Atwood*, *Revere*, $ 3-5; *Massasoit*, *Metatoxet*, $ 2½-3½; *Arlington*, $ 2-3½, and many others; also *Lodging* and *Boarding Houses*), second only to Newport among the Rhode Island seaside-resorts, has a splendid beach and good opportunities for boating, fishing, and driving. Good views are obtained from *Narragansett Heights* (200 ft.) and the top of *Hazard's Castle* (165 ft.). Among the other attractions is a large *Casino*. The rocks are fine both in form and colour. *Point Judith* (p. 248) lies 5 M. to the S., and at *Hammond's Mills*, 7 M. to the N., is the house in which *Gilbert Stuart* (p. lxxxi) was born in 1755 (tablet in St. Paul's Church, Wickford, see below). *Commodore Perry* (1785-1819; p. 249) was a native of Narragansett. Steamers ply daily to Newport.

An *Electric Tramway* runs from Narragansett Pier to Providence (see below), passing through *Saunderstown* (Saunders Ho., $ 2), and *East Greenwich* (Updike Ho., $ 2-3).

168 M. *Wickford Junction*, for (3 M.) *Wickford*, whence steamers ply daily to Newport (comp. p. 248).

188 M. **Providence.** — Narragansett Hotel, cor. Weybosset St. and Dorrance St., $ 3-6; Crown, Weybosset St., R. from $ 1½; Dorrance, Westminster St., R. from $ 1; Newman, Aborn St., R. from $ 1. — *Electric Tramways* run to all suburban points, to *Bristol* (p. 245), etc. — *Steamers* to New York, Newport, Block Island, etc. — *British Vice-Consul*, Mr. George A. Stockwell.

Providence, the capital of Rhode Island and the second city in New England, with (1905) 198,635 inhab., is pleasantly situated on *Providence River* (the N. arm of Narragansett Bay), at the head of navigation.

Providence was founded by Roger Williams in 1636, after his expulsion from Massachusetts. It carries on important manufactures of cotton and woollen goods, steam-engines, silver-plate (Gorham Co.), machinery (Brown & Sharpe Manufacturing Co.), jewellery, iron, etc. (total value, in 1905, $ 91,980,963 or 18,396,192*l.*).

The *Union Railway Station* (1897) is in Exchange Place, an open square near the centre of the city. On the W. side of the square stands the *City Hall*, with a medallion of Roger Williams on the façade, and on the E. side is the new *Federal Building* (1908). In the centre is a *Soldiers' & Sailors' Monument*, and near the station is a *Statue of General Burnside* (1824-81). Westminster Street, the chief business-thoroughfare, runs hence towards the S.W., and from it an *Arcade*, 225 ft. long, leads to the left to Weybosset St. — A little to the N. of the station stand the *State Normal School* and the **State House* (1903), the latter a huge Renaissance structure of Georgia marble and white granite, surmounted by a double dome of unusual design (*View). — Among the other prominent buildings are the *Roman Catholic Cathedral*; the *First Church of Christ Scientist*, corner of Prospect and Meeting Sts., with large, gilded dome; the *Church of the Blessed Sacrament* (Academy St.), designed by La Farge (1904), with a beautiful Byzantine interior; the *Butler Hospital*; and the *Rhode Island Hospital*. The handsome *Public Library* (1898) occupies the block bounded by Washington, Greene, and Fountain Sts.

The most interesting part of the city, however, lies on the E. side of the Providence River, reached by a bridge near the Union Depot. Just beyond the bridge, at the corner of College St. and Benefit St., is the *County Court House*, next to which is the *Athenaeum*, containing a library of 70,000 vols. and some interesting portraits (one by Sir Joshua Reynolds) and a small painting on ivory by Malbone ('The Hours'). In Benefit St. are the *Providence County Court House* and the *Rhode Island School of Design*, the latter comprising the *Metcalf Memorial Hall* (1903) and *Pendleton Hall* (1906; with a remarkable collection of Colonial furniture).

About 1/4 M. up College Hill is Brown University (715 students), founded in 1764, in a campus shaded with fine old elms and entered by tasteful memorial gates. Among its chief buildings are *University Hall* (1770), *Hope College* (1822), *Sayle's Memorial Hall*, and *Rockefeller Hall*, the seat of the *Brown Social Union*. At the corner of Waterman St. and Prospect St. is the *University Library* (160,000 vols.), soon to be transferred to the new *John Hay Memorial Library*. The *John Carter Brown Library*, to the S. of Wilson Hall, contains one of the best collections of Americana in the country. On the campus is a reproduction of the *Statue of Marcus*

Aurelius, at Rome. Near by, in Meeting St., are the *Women's College (Pembroke)*, with 200 students, and a '*Fresh Air School*'. — Opposite the University buildings is that of the *Rhode Island Historical Society*, with interesting books, portraits, and relics. — *Prospect Hill Terrace*, near the University, commands a fine *View of Providence.

Among the interesting old buildings in Providence are the *Old State House* (1762); the old *Market Building* (1773); the *First Baptist Church*, originally founded by Roger Williams and the oldest Baptist Church in the country; the *Ives House*, at the corner of Brown St. and Power St., near the University, with an interesting portico; the *Cushing House* (1734); the *Hopkins House* (1750); the *John Brown House*, Power St., cor. of Benefit St., a fine example of its date (1786); and the *Betsy Williams House* (1775), Roger Williams Park.

At the S. end of the city is the *Roger Williams Park*, containing a statue of Roger Williams (1604-83). On the Seekonk River, near the E. end of Power St., is the *Slate* or *What Cheer Rock*, the first landing-place of Roger Williams.

Among the pleasant points in the environs of Providence are *Hunt's Mill* (3 M.), *Rhodes-on-Pawtuxet*, *Vanity Fair*, *Crescent Park*, and *Rocky Point* (all reached by tramway, the last two by steamer also). — **Bristol** (*Belvedere*, $ 2½-5), reached by rail or electric tramway (14 M.; see p. 243), with many quaint and pleasant old houses, carries on yacht-building and the manufacture of rubber goods. The Herreshoff Yards here produced the 'Columbia', 'Reliance', and other famous defenders of the International Yacht Cup. Pop. (1905) 7512. A ferry-boat runs from Bristol to *Bristol Ferry*, connecting with the Newport & Providence Street Railway (p. 248). — Near Bristol is *Mount Hope*, seat of King Philip (p. 243). — The sail down **Narragansett Bay* to Newport (there and back 75 c.) is very attractive (comp. p. 253). — Steamer to *New York* ($ 3-3¼), see p. 246.

From Providence to Worcester, 44 M., railway in 1¼-1¾ hr. — This line ascends the pretty industrial valley of the *Blackstone*. At (7 M.) *Lonsdale* are the grave and monument of *William Blaxton* (see p. 258; to the right). 16 M. *Woonsocket* (pop. 32,196 in 1905). — 44 M. *Worcester*, see p. 240.

From Providence to Boston we follow the N. Y. N. H. & H. R. R. 193 M. *Pawtucket*, a city with (1905) 43,381 inhab. and large thread and other mills, was the place where cotton-manufacturing was introduced into the United States by Samuel Slater in 1790. The Slater Mill is still standing. — 201 M. *Attleboro*, in Massachusetts, with manufactories of plate and jewellery; 208 M. *Mansfield*. About 2 M. from (215 M.) *Sharon* (The Sharon, $ 2½) lies *Massapoag Lake* (Massapoag Hotel, $ 3-4). 218½ M. *Canton Junction*. — 223 M. *Readville* (p. 246), with its well-known trotting-track (comp. p. xciii). Readville is the nearest station for an ascent of *Great Blue Hill* (650 ft.), the highest of the *Milton Hills* (p. 275; fine view), now part of a State Reservation of 4230 acres. At the top is a well-known observatory. — The train approaches Boston through (224 M.)

Hyde Park and the suburbs of *Jamaica Plain* and *Roxbury.* 231 M. *Back Bay Station* (p. 253).

232 M. *Boston* (South Union Station), see R. 31.

c. Viâ Hartford and Willimantic.

228 M. New York, New Haven, and Hartford R. R. in 6 hrs. (fares as at p. 234).

From New York to (110 M.) *Hartford*, see R. 30a. Beyond Hartford this line diverges to the right from that to Springfield (p. 239) and crosses the *Connecticut River.* 119 M. *Manchester;* 122½ M. *Vernon*, the junction of a line to *Melrose* and Springfield (p. 239). — 142 M. **Willimantic** *(Irwin, Hooker Ho.,* $ 2½; *Rail. Restaurant)*, a manufacturing borough on the river of the same name, with 8937 inhab., is the junction of the Central Vermont R. R. (see p. 243). — 167 M. *Putnam*, the junction of lines to Worcester (p. 240) and Norwich (see p. 248). 175 M. *East Thompson*, the junction of a line to *Webster* and *Southbridge.* We now enter *Massachusetts.* 181 M. *Blackstone Junction;* 193 M. *Woonsocket Junction;* 201 M. *Franklin*, with the *Ray Memorial Library, designed by H. H. Gallison and adorned with frescoes by him and Tommaso Juglaris; 208½ M. *Walpole.* Beyond (219 M.) *Readville* (p. 245) we cross the *Charles River.* 223½ M. *Dorchester*, a suburban district of Boston with the Pierce House (1635), said to be the oldest house but one in the United States. The train crosses the *South Bay*, passes the suburban stations of (225½ M.) *Dudley Street* (p. 255) and (227¼ M.) *South Boston*, and enters the S. Union Station at —

228 M. *Boston* (see R. 31).

d. By Steamboat.

1. Steamboat to *Newport* and *Fall River* in 10-12 hrs. (Pier 19, N. River, foot of Warren St.); Railway thence to *Boston* in 1⅓ hr. (through-fare $ 3.65; stateroom, usually with two berths, $ 1-5).

2. Steamboat to *New London* ('Norwich Line') in 9-10 hrs. (Pier 40, N. River) and Railway thence to *Boston* in 3-4 hrs. (fares as above).

3. Steamboat to *Providence* in 11-12 hrs. (Pier 18, N. River; in summer only) and Railway thence to *Boston* in 1¼ hr. (fares as above).

The steamers on all these lines are well fitted up and contain good restaurants, etc.; those of the Fall River Line are especially large and luxurious (comp. p. 11). All run at night, leaving New York about 5 or 6 p.m., and all proceed through Long Island Sound, so that one general description suffices. Each line runs directly to its terminus, without intermediate stoppages. Cabin berths are included in the fares on all night-steamers, but staterooms are extra. Fares are reduced 25 per cent in winter. Meals are served à la carte on all steamers. Bands play on the Providence and Fall River boats. The trains in connection are timed to reach Boston about 6-9 a.m. The hours in the reverse direction are similar. The steamers are equipped with the wireless telegraph (50 c. per 10 words).

4. The Turbine Steamers 'Yale' and 'Harvard' of the *Metropolitan Line* run daily all the way between New York (Pier 45, N. River) and *Boston* (India Wharf), leaving each port at 5 p.m. and taking 15 hrs. for the trip (fare $ 3.65; stateroom from $ 1).

The steamers of all the lines star in the North River (pp. 31, 32)

and proceed round the Battery (p. 33), affording fine views of the city and harbour. To the right lie *Ellis*, *Liberty*, and *Governor's Islands* (pp. 2, 3). Passing the last, we bend to the N., enter the *East River* (p. 31), and pass under *Brooklyn Bridge* (p. 40), which is seen to great advantage from the steamer's deck. Beyond the bridge, to the right, opens *Wallabout Bay*, with the *U. S. Navy Yard* (p. 76). On both sides are wharves crowded with shipping. The tower-foundations of the new *Manhattan Bridge* may be seen to the right and left, and farther up we pass under the *Williamsburg Bridge* (p. 40), steer between *Blackwell's Island* (p. 71; new bridge in progress) and *Long Island City* (p. 78), and then thread *Hell Gate* (p. 71), with *Ward's Island* and *Randall's Island* (p. 71) to the left.

We now leave the East River and enter **Long Island Sound**, which extends for a distance of 115 M. between *Long Island* (see p. 79) on the right and the coasts of New York and Connecticut on the left. Its width varies from 3 M. to 30 M. As we enter the Sound, we pass *Berrian's Island*, the *Brothers*, and *Riker's Island*. To the right is *Flushing Bay*, with the town of *Flushing* (p. 81). The steamer threads a narrow channel, passes *Throg's Neck* (with Fort Schuyler; to the left), and enters a wider part of the Sound. *Little Neck Bay*, to the right, is famous for its clams. Among the islands which conceal the mainland-coast here are *City Island*, *Hart's Island* (with the paupers' cemetery of New York), and *Hunter's Island*. On *Sand's Point*, to the right, is a lighthouse (fixed white light). Among the chief points on the mainland farther on are *Greenwich*, *Norwalk*, *Bridgeport* (see p. 235), *New Haven* (p. 236), and *Saybrook* (p. 242), at the mouth of the Connecticut River. The lights passed include *Captain's Island* (fixed white), *Stratford Shoal* (flash white), *Falkner's Island* (revolving white), and *Cornfield Point Lightship* (flash white and fixed red), to the left; and *Eaton's Neck* (fixed white), *Plum Island* (revolving white), and *Little Gull Island* (fixed white), to the right. We are here about 7 hrs. out from New York. The NORWICH STEAMER now heads for shore, enters the Thames, and stops at *New London* (p. 242), where passengers disembark and proceed by train to Boston.

FROM NEW LONDON TO BOSTON, 108 M., railway in 4-5 hrs. The train follows the bank of the *Thames* (view to the right). — 8 M. *Mohegan*, with a few half-breeds who represent the 'last of the Mohicans' (comp. below).

13 M. **Norwich** (*Wauregan Ho.*, $ 2-3½; *Del-Hoff*, $ 2), a manufacturing city with 17,250 inhab., pleasantly situated between the *Yantic* and *Shetucket*, which here unite to form the Thames. Among its chief buildings are the *Court House*, the *Free Academy*, and *St. Patrick's Cathedral*. The *Slater Memorial* contains drawings and photographs of masterpieces of art, casts, a library, etc. The old *Indian Cemetery*, in Sachem St., has been the burial-ground of the Mohicans or Mohégans from time immemorial. and contains an obelisk to their famous chief Uncas (d. 1683). On *Sachem's Plain*, near *Greenville* (1¾-2 M. from Norwich), another monument marks the spot where Uncas captured and executed Miantonomoh, Sachem of the Narragansetts (1643).

Steamers run from Norwich to New York (twice weekly), Watch Hill (p. 243), Block Island (p. 242), Fisher's Island (p. 242), and other points.

At Norwich we diverge to the right from the Central Vermont R. R., which runs to *Brattleboro*, etc. (comp. p. 243). 14½ M. *Greenville* (p. 247). At (29 M.) *Plainfield* we cross the Worcester division of the N. Y. N. H. & H. R. R. About 4 M. to the W. of (38 M.) *Danielson* is *Brooklyn*, the home of General Israel Putnam (see p. 282). At (47 M.) *Putnam* (p. 246) we join the main line of the N. Y. N. H. & H. R. R. Hence to (108 M.) *Boston*, see R. 30 c.

The Fall River and Providence Steamers now quit Long Island Sound, *Montauk Point* (p. 81) lying nearly due S. They pass outside *Fisher's Island* (p. 242). To the left, beyond Fisher's Island, is *Watch Hill* (p. 243; fixed white light), while *Block Island* (p. 242; fixed white light) lies off to the right as we begin to bend towards the N. The revolving white light of *Point Judith*, 5 M. to the S. of Narragansett Pier, next shows ahead, to the left; and in rounding this headland, if anywhere, we may experience a little rough weather. Passing *Narragansett Pier* (p. 243; left), we keep to right of the *Beaver Tail Light* (flash white), on *Conanicut Island* (p. 252), steer between *Goat Island* (with *Fort Walcott;* left) and the mainland (*Fort Adams;* right), and enter Newport harbour.

Newport. — **Hotels.** New Cliffs Hotel (Pl. b; D, 2), with view of the sea (burned in the summer of 1908); Aquidneck House (Pl. a; C, 1), Pelham St., $ 4. Few of the hotels of Newport compare favourably with those of other large watering-places, as the fashionable visitors reside almost entirely in the so-called 'Cottages' or in Boarding Houses, such as the *Muenchinger King & Hill Top Cottage* (fashionable; from $ 5 a day), the *Faisneau*, *Robinson's*, the *Margaret*, *Bateman House* ($ 4), *Bellevue*, and *La Forge Cottage*.

Restaurants. *Bussell*, in the Casino (p. 250); *Berger*, Bellevue Ave. (orchestra); *Gunther*, 3 Bath Road; *Bellevue*, see above.

Electric Tramways run from foot of Franklin St. and Broadway to Easton's Beach (5 c.), passing near Washington Sq.; also to Morton Park and 'One Mile Corner', connecting with line to Stone Bridge and Fall River. Other lines run to the War College and Training Station. — *Public Brakes* or '*Barges*' run from Washington Sq. (also from rail. stat. and wharves) along Bellevue Ave. to *Bailey's Beach* (10 c.); also from Easton's Beach round the *Ocean Drive* (50 c. each). — *Hack* (bargaining advisable) about $ 1 per hr.; round the Ocean Drive (1-4 pers.) $ 3-5; from the wharf or station to the hotels 50 c. (1-2 pers.). *Hotel Omnibus* 50 c.

The **Newport & Providence Street Railway** (electric) runs to (10 M.) *Bristol Ferry* (fare 20 c.), connecting with ferry to *Bristol* (p. 245; fare 10 c.) and forming the shortest route (2-2¼ hrs.) from Newport to Providence (p. 243; through-fare 45 c.).

Bathing. The use of bathing-cabin and costume at *First* or *Easton's Beach* costs 25 c. Full costume obligatory. The popular hour is 11-12.

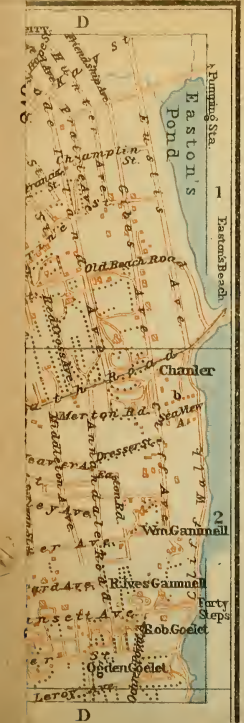
Boats may be hired at Kinsley's, Long, and Spring Wharves. Newport is a favourite port for *Yachts* and *Yacht Racing*.

Steamboats to *Block Island*, *Conanicut Island*, *Narragansett Pier*, *Providence*, *Wickford*, etc. start from the Commercial Wharf (Pl. C, 1, 2). The *New York* steamer ($ 3) starts at the Long Wharf (Pl. C, 1).

Railway Station (for Boston, etc.; Pl. C, 1), West Marlborough St., below Washington Sq. Another route to Boston (and also to New York) is by steamer to *Wickford* and thence by rail viâ *Wickford Junction* and the *Shore Line* (comp. p. 243).

Casino (Pl. D, 2), Bellevue Ave. (comp. p. 250). Concerts 11 a.m. to 1.30 p.m. (50 c.), and on Sun. 8-10 p.m. (25 c.). — **Opera House** (Pl. C, 1), in Touro St. — The *Newport Horse Show* is held in September.

Post Office (Pl. C, 2), Thames St.


D
Eastons Pond
Champlin St.
Old Beach Road
Eastons Beach
Chanler
Dexter St.
Wm Gammell
Rives Gammell
Forty Steps
Rob Goelet
Ogden Goelet
Leroy Ave.
1
2
D

NEWPORT R.I. 1: 60.000
1 James J. Van Alen D3
2 Mrs. Wm. Astor "
3 Wm. Waldorf Astor C3
4 Mrs. O.H.P. Belmont D3
5 Perry Belmont "
6 Theod. M. Davis A4
7 Mrs. Stuyvesant Fish C4
8 W.B. Leeds D4
9 Ch. W. Lippit C4
10 Wm. Starr Miller "
11 Col. Edw. V. Morrell D3
12 E.D. Morgan B3
13 Mrs. Herm. Oelrichs D3
14 Marsden J. Perry A4
15 John T. Spencer D3
16 Twombly-Lorill-Wolfe "
17 Corn. Vanderbilt D3
Narragansett Bay
Harbor
Conanicut I.
Dumplings
Bull's Pt.
Ft. Dumpling
Ft. Adams
Lime Rock
Brenton's Cove
Pt. of Trees
Prof. A. Agassiz
Golf Club
Polo Grounds and Golf Links
Telegr. Hill
Pirate's Cave
Brenton's Pt.
Graves Pt.
Life Sav. Sta.
Price's Neck
Cherry Neck
Spouting Rock
Gooseberry I.
Bailey's Beach
Lily Pond
Almy's Pond
Coggeshall's Ledge
Land's End
Rough Pt.
Gull Rk.
Sheep Pt.
Ochre Pt.
Forty Steps
Easton's Beach
Easton's Pond
Pumping Sta.
Beach Pav.
Goat I.
Ft. Walcott
Torpedo Sta.
Ferry
Morton Pk.
Coaster's Harbor I.
Fall River
Miantonomy Hill
Bristol Ferry
Friends Cem.
City Hall
Redwood Lib.
Old Stone Mill
Chanler
Casino
Wm. Gammell
Rives Gammell
Rob. Goelet
Ogden Goelet
Harbor
PARK
Easton's Pond
Easton's Beach
Pumping Sta.
Morton Pk.
1: 30.000

Chief Attractions. Those who have but one day to spend at Newport should go to the *First Beach* (p. 250), viâ *Touro Park* and the *Old Mill* (p. 250); walk hence by the *Cliff Walk* (p. 250) to *Bailey's Beach* (p. 251); and then take the *Ocean Drive* (p. 251). Other interesting points are *Purgatory* (p. 250), the *Hanging Rocks* (p. 250), and *Second Beach* (p. 250).

Newport, the undisputed 'Queen of American Seaside Resorts', occupies a low plateau near the S.W. extremity of *Rhode Island* (see p. 252), rising from a fine harbour which opens on the E. side of Narragansett Bay. It contains (1905) 25,039 inhabitants. This population is, however, very largely increased in summer (June-Sept.), when visitors flock to the town from all parts of the United States, taking up their abode for the most part in the luxurious country-houses and private villas known here as 'cottages'. The older part of the town adjoins the harbour, but the new and fashionable quarters lie higher up and farther back, extending across to the ocean side of the narrow island.

The chief reason of Newport's popularity is said to be its balmy and equable climate, but the natural beauty of its cliffs and surroundings would alone justify its reputation. The fashionable people of the whole N.E. part of the United States spend the early months of summer here as regularly as they pass the later amid the Berkshire Hills (p. 337).

Newport was settled in 1639 by William Coddington and other dissenters from the Puritan church of Massachusetts, and a century later had about 5000 inhabitants. In 1770 Newport was surpassed by Boston only in the extent of its trade, which was considerably greater than that of New York. About this time a visitor to New York wrote back to the 'Newport Mercury' that at its present rate of progress New York would soon be as large as Newport. It suffered greatly during the Revolution, however, and never recovered its commercial importance, so that in 1870 its population was no larger than in 1770. During part of the Revolutionary struggle Newport was occupied by the French allies of the Americans, who were so favourably impressed with Rhode Island, that they sought to have it ceded to France. *Wm. Ellery Channing* (see p. 260) was a native of Newport, and *Bishop Berkeley* (1684-1753) lived here from 1729 to 1731 (see p. 250).

The central point of Old Newport is Washington Square (Pl. C, 1) or the Parade, within a few minutes' walk of the railway station and steamboat-wharf. Here are the *State House* (1738-43; with portrait of Washington, by Stuart), the old *City Hall* (new one in Broadway, cor. of Bull St., Pl. C, 1), a *Statue of Commodore O. H. Perry*, the hero of Lake Erie (pp. 187, 243), the *Perry Mansion* (Pl. C, 1), and the *Roman Catholic Church* (Ionic portico).

Following Touro St. to the S.E., we pass (left) the *Synagogue* (1762; the oldest in the United States), the *Newport Historical Society* (10-4; interesting relics), and (5 min.) the picturesque *Hebrew Cemetery*. Touro St. ends here and Bellevue Avenue (Pl. C, D, 1, 2), the fashionable promenade, begins, running to the S. (right). To the right is the *Newport Reading Room*. A little farther on, to the left, is the *Redwood Library* (Pl. D, 1; 1748), a Doric building, containing 50,000 vols. and some sculptures and paintings (open 12-2). The fine *Fern-leaf Beech*, at the corner of Bellevue Ave. and Redwood St., should be noticed. Nearly opposite this is Touro Park (Pl. C, D, 1), containing the **Round*

Tower or *Old Stone Mill*, the origin of which is still somewhat of a mystery. Some authorities believe that it was built by Gov. Arnold in the 17th cent. as a wind-mill, while others regard it as very possibly the central part of a church built by the Norsemen in the 11th century. Longfellow mentions it in his 'Skeleton in Armor'. The park also contains statues of *M. C. Perry* (1794-1858) and *W. E. Channing* (p. 249; erected in 1893); and opposite its S. side stands the *Channing Memorial Church* (Pl. C, 1, 2).

A few hundred paces farther on, *Bath Road* (electric tramway) leads to the left from Bellevue Ave. to the (10 min.) First Beach.

Bellevue Avenue soon passes the *Casino* (Pl. D, 2; left), a long, low, many-gabled building, containing a club (introduction necessary), a theatre, etc. (concerts, see p. 248). The Lawn Tennis Championship of America is decided in the courts attached to the Casino (Aug.). Farther on the avenue passes between a series of magnificent villas, among which are conspicuous the *Berwind House* (Pl. C, D, 2; to the right, at the corner of Dixon St.) and the white marble house and wall, built by *Mr. W. K. Vanderbilt* but now owned by *Mrs. O. H. P. Belmont* (Pl. 4; D, 3; to the left, about 3/4 M. farther on). The avenue then turns sharply to the right and ends at *Bailey's Beach* (p. 251).

First or Easton's Beach (Pl. D, 1), a strip of smooth hard sand, 3/4 M. long, affords some of the best and safest surf-bathing on the Atlantic coast. Besides the bathing-houses (see p. 248) there is a handsome pavilion, containing a restaurant and hot and cold baths. Behind the beach lies *Easton's Pond*, and at its farther (E.) end is a group of cottages. *Easton's Point*, forming the E. barrier of the beach, affords an excellent view of Newport.

From the E. end of the beach a road leads round Easton's Point to (3/4-1 M.) ***Purgatory**, a curious fissure in the conglomerate rocks, 150 ft. long, 7-14 ft. wide, and 50 ft. deep, resembling the so-called Chasms, near Manorbier in S. Wales (see *Baedeker's Great Britain*). Numerous legends attach to it, one relating how a youth leaped it at the challenge of his lady-love and then renounced her in the spirit of the hero of 'The Glove' by Schiller: 'Not love it is, but vanity, sets love a task like that'. Just beyond Purgatory is *Sachuest* or *Second Beach*, where the surf is much heavier than at Easton's Beach. To the N. of Sachuest Beach is *Paradise Valley*, with the picturesque *Paradise Rocks*, ending in the *Hanging Rocks*, below which Bishop (then Dean) Berkeley (p. 249) was wont to sit. Here, it is said, he composed his 'Alciphron, or the Minute Philosopher', and also the lyric containing the much-quoted verse: —

'Westward the course of empire takes its way,
'The first four acts already past,
'A fifth shall end the drama with the day,
'Time's noblest offspring is the last.'

Bishop Berkeley's residence (*Whitehall*), in Berkeley Ave., to the N. of Paradise Road, is not far off (small fee). Those who have come thus far by carriage (the road passes near the beaches) may continue along *Indian Avenue* to *Boothden*, once the residence of Edwin Booth (p. 24).

At the W. end of Easton's Beach begins the famous ***Cliff Walk** (Pl. D, 2), which runs along the winding brow of the cliffs for about 3 M., with the ocean on one side and the smooth lawns of the handsomest 'cottages' in the town on the other (fine views). No fences intervene between the walk and the cottage-grounds. Passing the *Chanler House* (Pl. D, 2) and two groups of smaller cottages, clustered

round a central hotel (New Cliffs Hotel, comp. p. 248), we soon reach the finely kept enclosure of the *Gammell Family* (Pl. D, 2), containing several villas. At the end of it are the '*Forty Steps*' (Pl. D, 2), descending to the rocks, with an outlook platform commanding a fine *View (to the E., Easton's Point, Sachuest Point, and West Island in the distance; below, to the right, *Ellison's Rocks*). Crossing *Narragansett Avenue* (Pl. C, D, 2), which leads from this point to Bellevue Ave. (p. 249), we enter the *Robert Goelet Place*, and beyond *Webster Street* (Pl. C, D, 2) we pass the *Ogden Goelet House*, a reproduction of a country-house in England. A little farther on we pass the **Twombly-Lorillard-Wolfe Cottage* (Pl. 16; D, 3), a long many-gabled red building. The next house is that of the late *Mr. Cornelius Vanderbilt* (Pl. 17), an imposing structure with a rustic summer-house on *Ochre Point* (Pl. D, 3), where we turn to the right (W.). Farther on we cross *Marine Avenue* and enter the grounds of *Mr. Perry Belmont* (Pl. 5), adjoining which lay the enclosed rose-garden of *George Bancroft* (1800-1891), the historian. Next in order, to the S., is the villa of *Mrs. Herman Oelrichs* (Pl. 13). Beyond the red villa of *Mrs. William Astor* (Pl. 2) we pass the white marble palace built by *Mr. William K. Vanderbilt* (see p. 250), a magnificent dwelling, but hardly in keeping with the *genius loci*. Passing *Sheep Point* (Pl. D, 3, 4), the path descends to a lower level. Opposite the picturesque stone house of *Mr. W. B. Leeds* (Pl. 8; D, 4) we cross a small rocky bridge. To the left is *Rough Point* (Pl. D, 4). We then cross the *Ledge Road* (Pl. C, D, 4), leading from Bellevue Ave. to the *Land's End* (with *Ex-Governor Lippit's House*, Pl. 9), off which lies *Coggeshall's Ledge* (Pl. C, D, 4). Crossing the hill, we finally reach **Bailey's Beach** (Pl. C, 4), a small bay with a long row of bathing-houses, which has become the fashionable bathing-resort of the Newport cottagers.

From Bailey's Beach we either return to town by one of the 'barges' running along Bellevue Ave. (p. 249), or we may begin the beautiful ***Ocean** or **Ten Mile Drive**, which skirts the coast of the peninsula to the S. of the town for about 10 M., commanding magnificent views (2-2½ hrs.). *Ocean Avenue*, forming the first part of the drive, begins at Bellevue Ave. and runs to the W. past Bailey's Beach. To the left, at the W. arm of the beach, is the *Spouting Rock* (Pl. C, 4), where the water, after a storm, rushes through an opening in the rock and is forced to a height of 40-50 ft. At *Lily Pond* (Pl. C, 3) we turn to the left (S.). Looking over the bay to the left, we see *Gooseberry Island* (Pl. C, 4), with the house of the *Newport Fishing Club*. We now cross a bridge over a small inlet and see to the left, on *Price's Neck*, the *United States Life-Saving Station* (Pl. B, 4). At *Brenton's Point* (Pl. A, 4; *View), directly in front of the house of *Mr. Theodore M. Davis* (Pl. 6), the road turns to the right and runs towards the N., soon passing *Castle Hill* (Pl. A, 4, 3), the residence of Prof. Alex. Agassiz, and several other villas.

We then turn again to the right, with the ocean behind us, and soon turn to the left into *Harrison Avenue* (Pl. A, B, 3) or the *Fort Road*. To the right lie the *Golf Links*, *Club House*, and *Polo Grounds*. On the point to the left, projecting into Narragansett Bay, stands *Fort Adams* (Pl. B, 2; see below), and ahead of us lies Newport Harbour. To the left are the house of *Mr. E. D. Morgan* (Pl. 12; B, 3) and some other fine 'places'. On a rocky islet to the left is the *Lime Rock Lighthouse* (Pl. C, 2), in charge of Ida Lewis, the 'Grace Darling' of America, who celebrated the 50th anniversary of her lighthouse service in 1907. Turning again towards the bay, we follow the road skirting the harbour, and regain the Parade (p. 249) through *Thames Street* (Pl. C, 1, 2), the chief business-street of the old town.

Among other points of interest in or near Newport may be mentioned *Trinity Church* (Pl. C, 1), in Church St., dating from 1725 and often preached in by Bp. Berkeley (with old square pews, etc.); the *First Baptist Church*, in Spring St. (1644); *Vernon House* (Pl. C, 1; tablet), Clarke St., near Mary St., headquarters of Count Rochambeau, the French commandant in 1780; the *Sayer* or *Bannister House* (tablet), the headquarters of Gen. Prescott, the commander of the British army of occupation in 1777; the *U. S. Naval Training Station* and *War College*, on *Coasters Harbor Island* (3 p.m. till sunset; beyond Pl. C, 1); the *Naval Hospital; Fort Adams* (Pl. B, 2; fine view), near Brenton's Cove, 3 M. from the town by road, but easily reached by boat across the harbour, with room for a garrison of 3000 men (guard-mount and dress-parade at 9 a.m. daily, except Sun.; battalion drill, Wed. 4-5; band-practice, Mon., Wed., & Frid. at 3 p.m.); *Fort Walcott* (Pl. B, C, 1), with the *U. S. Torpedo Station*, on Goat Island (no adm.); *Morton Park* (Pl. C, 3), at the S. end of Thames St.; and *Miantonomy* or *Miantonomoh Hill* (view), on the N. side of the city (1½ M.; at the end of Malbone Road; beyond Pl. C, D, 1). — The steamer to *Wickford* (see p. 243; 12 M., in 1 hr.) passes between (l.) *Conanicut Island* (Pl. A, 2) and (r.) the islands of *Prudence*, *Hope*, and *Despair*. *Jamestown* (Gardner Ho., Thorndike, Bay View Ho., $ 3), on Conanicut, is a growing summer-resort; the headland nearest Newport, known as the *Dumplings* (Pl. A, 2), is crowned with a fort. At the S. end of the island stands *Beaver-Tail Lighthouse* (1667); at the N. end is *Conanicut Park*. From Wickford to *Boston* (2¾-3 hrs.) and to *New York* (5-8 hrs.), see p. 243. *Fall River* (see below) is 18 M. from Newport by rail.

Rhode Island, the Indian *Aquidneck* ('island in the mouth of the bay'), which was bought from the Indians in 1639, is about 15 M. long and 3-4 M. wide, with a population of about 26,000. Its present name was long supposed to have been given to it from a fancied resemblance to the Isle of Rhodes, but has been more recently explained as derived from its position in the 'roads' of Narragansett and thus as a simple translation of Aquidneck (see above; comp. 'English Historical Review', Oct., 1903). It has been extended to the whole state (the full official title, however, being *State of Rhode Island and Providence Plantations*), far the larger portion of which is on the mainland. The island is fertile and well farmed, and much of its surface is picturesque. It is connected with the mainland by a railway bridge and an ordinary road-bridge.

Leaving Newport, the Fall River Steamer steers between *Prudence Island* (see above) and Rhode Island, and enters *Mt. Hope Bay*, opening off the N.E. corner of Narragansett Bay. On the peninsula to the left lies *Bristol* (p. 245). In 1 hr. we reach (r.) **Fall River** (*Mellen Ho.*, R. from $ 1; *Wilbur Ho.*, *Evans Ho.*, $ 2). The river to which it owes its name rises a little to the E. and falls about 140 ft. in ½ M., affording admirable water-power to the

mills which make the town one of the chief cotton-manufacturing places in New England. Total value of industrial products in 1900, $43,071,530 (four-fifths cotton goods). Pop. (1905) 105,762. The *Bradford Durfee Textile School* was opened in 1904. Passengers for Boston here disembark and finish their journey by railway.

From Fall River to Boston, 51 M., railway in 1 1/3-1 3/4 hr. — The train skirts the E. side of Mt. Hope Bay and then crosses it to (6 M.) *Somerset*. 13 M. *Taunton* (City Hotel, $ 2-3), an industrial town with (1905) 30,967 inhab., is the junction of several local lines. 32 M. *Stoughton Junction;* 40 M. *South Braintree*, junction of a line to Plymouth (see p. 276). At *Brookdale Farm*, near (41 M.) *Braintree*, is the establishment of the *New England Kennel Club*, with many fine dogs. — 43 M. **Quincy** (comp. Map, p. 274; *Hancock Hotel*, $ 2-2 1/2), a thriving suburban city (28,076 inhab. in 1905), famous as the home of the Adams and Quincy families (see 'Where American Independence Began', by *Rev. Dan. Wilson*, 1903). The old *Quincy House* (the home of 'Dorothy Q.'), an interesting example of Colonial architecture, dating in part from 1636, has been fitted up as a museum of Colonial and Revolutionary relics (open daily, 11-4; adm. 25 c., free on Sat.). In the old Hancock Cemetery is a memorial to *Col. John Quincy* (1689-1767), after whom the place was named. The first railroad in the United States was constructed in 1826 to carry granite from the large quarries of Quincy to (4 M.) the nearest tide-water. — Beyond (45 1/2 M.) *Atlantic* we cross the *Neponset River* and various arms of Boston Harbour, traverse *Dorchester* and *South Boston*, cross the *Fort Point Channel*, and enter the S. Union Station at (51 M.) *Boston* (see below). — Trains also run from Fall River to (54 M.) Boston viâ (20 M.) *Middleboro* and (27 M.) *Bridgewater* (p. 278), connecting with the above-mentioned line at *South Braintree*. — The express trains running in connection with the steamers diverge from the above line at Taunton and run to Boston viâ *Mansfield* (p. 215).

From Fall River to New Bedford (p. 279), 14 M., railway in 35 min.

The Providence Steamer, on entering Narragansett Bay, steers to the left of *Beaver Tail Light* and *Conanicut Island* (p. 252), rounds *Warwick Neck*, and proceeds through the beautiful *Narragansett Bay* to *Providence* (p. 243). From Providence to *Boston* by railway (44 M., in 1 1/4 hr.), see p. 245.

31. Boston.†

Railway Stations. 1. *South Union Station* (Pl. I, F 4, 5; Pl. II, D 3, 4; restaurant), bounded by Atlantic Ave., Summer St., Beach St., and the harbour, one of the largest railway-stations in the world (810 ft. long and 700 ft. wide; area 11 1/2 acres; greatest single span of roof 228 ft.), completed in 1898 at a cost of $ 14,000,000. It contains 28 tracks (used by the New York, New Haven, & Hartford, and the Boston & Albany railways; 400 trains dispatched daily). — 2. *North Union Station* (Pl. I, E F, 3; Pl. II, B 2), Causeway St., another huge building with a frontage of 370 ft., used by the Boston & Maine railway. — 3. *Back Bay Station* (Pl. I, E 5; Pl. II, B C, 5), cor. of Dartmouth and Buckingham Sts., a secondary station for trains of the N. Y. N. H. & H. R. R. from the South Station. — 4. *Trinity Place Station* (Pl. B, 5), cor. of Trinity Place and Dartmouth St., and (5) *Huntington Avenue Station* (Pl. B, 5, 6), secondary stations of the B. & A. R. R., for outgoing and incoming trains respectively. — 6. *Boston, Revere Beach, & Lynn* (Pl. D, 3), Atlantic Ave. — The *Armstrong Transfer Co.* has its baggage-agents and carriages at each station.

† In the references to the Plans in the text, Pl. I refers to the adjoining general plan, Pl. II, or where neither I nor II is specified, to the plan of the centre of the city (p. 258).

Hotels. *Touraine (Pl. t; C, 4), at the noisy corner of Tremont and Boylston Sts., a large and sumptuously equipped house, with internal decorations in the style of the Château of Blois, a handsome library with 4000 volumes, and a view over the Common; R. from $ 3, meals à la carte. — *Somerset (Pl. y; A, 6), Commonwealth Ave., with view over the Fens, large rooms for balls and concerts, R. from $ 2; Vendome (Pl. a; B, 5), cor. of Commonwealth Ave. and Dartmouth St., from $ 5; Brunswick (Pl. b; B, 5), cor. of Boylston and Clarendon Sts., from $ 5, R. from $ 2; *Victoria (Pl. c; B, 5), at the cor. of Dartmouth and Newbury Sts., R. from $ 1; Lenox (Pl. w; B, 5), Boylston St., near the Public Library, R. from $ 1½; Copley Square Hotel (Pl. k; B, 5), Huntington Ave., from $ 3½, R. from $ 1½, these six in the pleasantest part of the city. — *Parker House (Pl. d; C, 3), School St., R. from $ 1; *Young's (Pl. e; C, 3), Court St., near the head of State St., R. from $ 1½; Brewster (Pl. f; C, 4), 15 Boylston St., R. with bath from $ 2; Bellevue (Pl. m; C, 3), 23 Beacon St., a family hotel, R. from $ 1½; Essex (Pl. s; D, 4), opposite the South Union Station, R. from $ 1½; Thorndike (Pl. i; C, 4), Boylston St., opposite the Public Garden, R. from $ 1½; United States (Pl. h; D, 4), near the South Union Station, commercial, from $ 2½, R. from $ 1; Revere House (Pl. l; C, 3), Bowdoin Sq., R. from $ 1; American House (Pl. n; C, 3), 54 Hanover St., R. from $ 1; Quincy House (Pl. o; C, 3), Brattle Sq., $ 3-5, R. from $ 1; Langham (Pl. p; C, 7), 1697 Washington St., at the S. End, $ 2½, R. from $ 1; Commonwealth (Pl. x; C, 3), 86 Bowdoin St., near the State House; Clark's, 577 Washington St.; Crawford House, Scollay Sq. (Pl. C, 3), these three commercial houses, R. from $ 1; Maverick, 24 Maverick Sq. (Pl. I; G, 3), E. Boston, R. $ 1; Franklin Square House (Pl. v; C, 6), for women only, from $ 3½, R. from $ 1. The Back Bay District contains several other first-class hotels (Westminster, etc.), consisting mainly of suites of rooms let to permanent tenants but also accepting transient guests. — *Boarding Houses* are numerous and comfortable, especially on Beacon Hill (Pinckney St., Mt. Vernon St., etc.) and at the S. End; rates from $ 7 a week. *Furnished Apartments* are also easily obtained, from $ 4 a week. Good boarding and lodging houses may be heard of at the *Women's Educational & Industrial Union*, 264 Boylston St., the *Y. W. C. A.*, 40 Berkeley St., and the *Y. M. C. A.* (p. 263).

Restaurants. At the *Touraine* (orchestra from 6 to 8 and 10 to 12 p.m.), *Somerset, *Parker House, *Young's, the *Thorndike*, the *Victoria*, the *Bellevue*, the *United States*, and most of the other hotels mentioned above; *Winter Place Hotel*, Winter Place, off Winter St.; *Ratskeller*, at the American House (see above), handsomely fitted up, D. $ 1¼; *Marliave*, 11 Bosworth St., D. with wine $ 1; *Vercelli*, 10 Hayward Place; *Lombardy Inn*, Boylston Place; *Hotel Napoli*, 84 Friend St.; *Café Angelo*, 340 Washington St., D. $ 1; these four Italian; *Frost & Dearborn*, 8 Pearl St.; *The Moulton*, 24 Summer St.; *German Café*, in the basement of the Hôtel Touraine, much frequented after the theatre; *Marston's*, 25 Brattle St.; *Crosby*, 19 School St.; *Cook*, 88 Boylston St., D. served for two $ 1½. S. for two $ 1-1½; *Zum Bürgerbräu*, Hayward Place; *Jacob Wirth*, Eliot St.; *Charles Wirth*, Essex St. (German beer at these); *Hayward*, Hayward Pl., D. $ 1; *Lafayette*, Hayward Pl., French, L. 35 c.; *Cafeteria ('Laboratory Kitchen')*, 69 Bedford St. and 50 Temple Pl. (luncheon, 11-3); restaurants at the railway-stations; *Thompson's Spa* (luncheon counter), 219 Washington St.; *Restaurants* of the Women's Educational Union, at 264 Boylston St. and 41 Charles St. (New England Kitchen); *Oak Grove Creamery*, cor. of Boylston and Berkeley Sts.; restaurants at *R. H. White's* and other large dry-goods stores, greatly patronized by ladies; *Vegetarian Restaurant*, 555 Boylston St.; *Bova* (Ital.), 96 Arch St. (Pl. C, 3); *Tea Rooms*, 160 B Tremont St. and 282 & 429 Boylston St. — *Huyler's, 146 Tremont St., 414 Boylston St., and 139 Summer St., for ices, etc.

Steamers ply from Boston to *Liverpool* (Cunard and Leyland lines from E. Boston, Pl. I, G 3; Pl. II, E 1; White Star line from Charlestown, Pl. I, F 2, 3; Pl. II, B 1), *Gibraltar*, *Genoa*, and other Mediterranean ports White Star and Cunard lines), *London*, *Glasgow*. *Hull*, *Hamburg*, *Jamaica*, and other points in the W. Indies, *New York*, *Philadelphia*, *Baltimore*, *Savannah*, *Portland*, *Halifax*, *Yarmouth*, *St. John*, *Augusta*, *Bangor*, *Mt.*

Desert, *Provincetown*, *Plymouth*, *Isles of Shoals*, *Nahant* (from Otis Wharf; fare 25 c.), *Revere Beach*, *Gloucester*, etc. (wharves on the W. side of the harbour). Steamers also run from Rowe's Wharf (Pl. D, 2) to *Nantasket Beach*, *Hull*, *Hingham*, and other points in Boston Harbour. — Ferries ply to *Chelsea* (3 c.) and *East Boston* (1 c.; see Map).

Street Railways. The urban rapid transit system of Boston is almost wholly under one management (*Boston Elevated Railway Co.*) and is, perhaps, unique in its combination of 'surface', elevated, tunnel, and subway lines, all connecting and interchanging passengers with each other. As a result of a most extensive system of free transfers, a single fare of 5 c. carries a passenger from any one point to any other within an area of about 100 sq. M. The track consists of nearly 9 M. of elevated railway, 5 M. of subway, and 215 M. of surface lines. The company operates 4500 cars and employs 8000 men. The operating power is electricity. In 1908 the number of passengers carried was 393,141,059.

a. Street or Surface Cars (uniform fare 5 c.). Electric tramways traverse most of the chief streets and run to numerous suburbs within a radius of 9 M. Among the chief points of starting and intersection are *Adams Sq.* (Pl. C, 3), *Scollay Sq.* (Pl. C, 3), *Park Sq.* (Pl. C, 4), *Bowdoin Sq.* (Pl. B, C, 3), *North* and *South Stations* (Pl. B, 2; D, 3, 4), and *Copley Sq.* (Pl. B, 5). For connection with the Subway and Elevated Railway, see below. Among the chief suburban termini are *Arlington* (p 275), *Brookline* (p. 274), *Cambridge* (p. 270), *Chelsea* (p. 275), *Dorchester* (p. 246), *East Boston* (p. 257), *Jamaica Plain* (p. 274), *Malden*, *Medford* (p. 312), *Newton* (p. 241), *Roxbury* (p. 246), *South Boston* (p. 257), and *West Roxbury* (p. 275; comp. Map at p. 274). Among the more distant points reached without change of car are *Worcester* (p. 240; cars start at Park Sq., Pl. C 4) and *Lowell* (p. 312; cars start at Sullivan Sq., Pl. I, D 2). The stopping-places of the cars are denoted by white bands on the trolley-posts; and passengers should take care to wait only at the *precise* points thus indicated.

b. Subway Cars. The chief starting-point of the subway cars for points to the W., N.W., and S.W., is *Park St.*, at the N.E. corner of the Common (Pl. C, 3), and the crowd here in business-hours is very great. An ingenious system of electric signs indicates the dock at which each car will start. These cars emerge from the Subway at the S.W. corner of the Public Garden (Pl. C, 4). Other surface-cars for points to the N. start at *Scollay Sq.* (Pl. C, 3). Cars from the S. enter the Subway at the junction of Tremont St. and Shawmut Ave. and run through the Subway to the North Station, passing all of the Subway stations. Cars from the N. enter the Subway at the North Station. Between these through-cars and those mentioned above, free transfer may be made at Park St. and at Scollay Sq. For free transfer to the elevated trains, see below. For a description of the Subway, see p. 260.

c. Elevated Railway (fare 5 c.). This runs from *Sullivan Sq.*, *Charlestown* (Pl. I; E, 1, 2) on the N. to (5 M.) *Dudley St.*, *Roxbury* (Pl. I; D, 7) ont he S. The main line is operated under the business district through the *Washington Street Tunnel* (p. 260). The direct trains (consisting of 3-5 cars) from N. to S. pass *Thompson Sq.* (Pl. II; A, 1) and *City Sq.* (Pl. II; B, 1), cross the river by the *Charlestown Bridge* (Pl. II; B, 2) to the *North Union Station* (Pl. B, 2), descend an incline into the tunnel, pass *Friend*, *Milk*, *Winter*, and *Boylston St.* stations, emerge from the tunnel at *Broadway* (Pl. C, D, 5), and again follow the elevated track to *Dover St.* (Pl. D, 5), *Northampton St.* (Pl. C, 7), and *Dudley St.* (Pl. I; D, 7). Northbound elevated trains pass the same elevated stations, but in the tunnel call at *Essex*, *Summer*, *State*, and *Union* stations. Elevated trains are also run between the above-named terminals in both directions viâ Atlantic Avenue (see Pl. II), diverging from the above route at North Station, passing *Battery St.*, *State St.*, *Rowe's Wharf*, and *South Station* (comp. Pl. II), and then bending to the right to *Beach St.* (Pl. C, 4). Extra trains also run in both directions between the North and South Stations, calling at intermediate stations.

The principal points for free transferring between the elevated trains and surface-lines are Sullivan Sq., City Sq., North Station, Dover St.,

Northampton St., and Dudley St. — The destination of the trains is announced by signs, the platform-officials, and the trainmen, while the trainmen also announce each station as the train reaches it.

[The *East Boston Tunnel* (p. 260) extends from Scollay Sq. (Pl. C, 3) along State St. and under the Harbour (Pl. I, G, 3, 4; Pl. II, D, 1, 2) to *Maverick Sq.* in E. Boston (Pl. I; G, 3). Surface-cars for East Boston and Chelsea run through this tunnel (toll of 1 c., in addition to the car-fare). The intermediate stations on this line are Court St., Devonshire St. (where free transfer may be made to the Washington St. tunnel trains), and Atlantic Ave. (free transfer to the elevated railway). An extension of the Elevated Railway from Dudley St. (Pl. I; D, 7) to Forest Hills (Pl. I; B, 9) is now under way. Subways to Cambridge and along the Charles River (see p. 268) have also been authorized.]

The **'Seeing Boston' Observation Cars** (comp. p. 19) offer a good opportunity of seeing the city in a short space of time. The cars (electric) leave Park Sq. (Pl. C, 4) every day, including Sun., at 10 a.m. and 2 p.m. Fare 50 c. The route passes through the most important parts of Boston, from Bunker Hill to the residential district on the Back Bay, traverses Cambridge and Brookline, and affords views of other suburbs. A guide accompanies each car to point out the objects of interest. *Automobiles* also leave Boston Common (opp. 169 Tremont St.) thrice daily (10 a.m., 2 & 4 p.m.) for a similar trip (fare $ 1). — *Mr. F. A. Waterman* (10 Hamilton Place) also conducts parties, starting from the front of Park St. Church at 9.30 a.m. and 2.30 p.m., to the chief sights of Boston (3 hrs.; 50 c.).

Carriages. For cab-hiring purposes Boston is divided into a series of districts, with regulations too complicated to summarize. For a short drive, within a district or from one district to that immediately contiguous, the rate for each person is: *Hacks* 50 c., other *Cabs* 25 c. Double fares from midnight till 6 a.m. Ordinary luggage free. Fare per hour (1-4 pers.) $ 1-1½, with two horses $ 1½-2½. — *Taximeter Cabs* have recently been introduced (fares as in New York, p. 18).

Places of Amusement. *Opera House* (Pl. B, 7), Huntington Ave., for grand opera (see p. 268); *Hollis Street Theatre* (Pl. C, 4); *Colonial Theatre* (Pl. 27; C, 4); *Majestic* (Pl. C, 4); *Tremont Theatre* (Pl. C, 4); *Park Theatre* (Pl. C, 4); *Boston Theatre* (Pl. C, 4), the largest in New England; *Castle Square Theatre* (Pl. C, 5), with good performances of plays at popular prices; *Grand Opera House* (Pl. 11; D, 5), Washington St. (plays); *Columbia Theatre* (Pl. 7; D, 5); *Bowdoin Square Theatre* (Pl. 3; C, 3); *Keith's Theatre* (Pl. C, 4), with a continuous variety performance (prices 25 c. to $ 1½); *Globe*, Washington St., cor. of Beach St.; *Orpheum* (Pl. C, 3), vaudeville; *Howard Athenaeum* (Pl. C, 3), *Palace Theatre* (Pl. 16; C, 3), *Lyceum*, variety performances at low prices; *Turnhalle* (Pl. C, 5), 29 Middlesex St. (occasional performances in German); *Italian Theatre*, North St.; *Théâtre Premier*, cor. of Washington and Beach Sts (Pl. C, 4); *Bijou Dream* (Pl. C, 4), these two for moving pictures and illustrated songs (adm. 10 c.). — The celebrated **Boston Symphony Concerts* are held in *Symphony Hall* (p. 267; Frid. afternoon and Sat. evening in winter). Other good concerts are given in the same hall (including popular evening concerts in May and June, with smoking and refreshments) and in *Steinert Hall*. *Potter Hall* (p. 267), *Jordan Hall* (p. 237), *Chickering Hall* (p. 267), *Tremont Theatre*, *Tremont Temple*, and *Mechanics' Hall* (p. 267; for large gatherings). Cheap *Sunday Concerts* are given at the *Majestic* and *Boston Theatres* (see above). The *Händel & Haydn*, *Harvard Musical*, *Cecilia*, *Apollo*, and *Orpheus* are among the best of the musical societies. — The free lectures of the *Lowell Institute* (tickets on previous application) are delivered in winter at the *Institute of Technology* (p. 263). — *Art Exhibitions* are held regularly in the rooms of the *Boston Art Club* (p. 267), and at *Copley Hall*, near Copley Sq. (Pl. B, 5). — Good *Flower Shows* are held in *Horticultural Hall* (p. 267). — The *Baseball Grounds of the National League* are in Walpole St., at the S. End; those of the *American League* are in Huntington Ave., close by. — A *Lawn Tennis Tournament* is held annually at the grounds of the *Longwood Club*. — *Public Golf*

Links at Franklin Park (p. 269). — *Charles River Park*, near the Cambridge end of Harvard Bridge (Pl. I; C, 4), with bicycle track, etc. — *Horse Races* at the *Country Club* (see below) and *Mystic Park*.

Clubs. *Somerset* (Pl. B, 4), 42 Beacon St.; *Algonquin* (Pl. A, B, 5), 217 Commonwealth Ave.; *St. Botolph* (Pl. B, 4, 5), 2 Newbury St., with Sat. evening reunions in the style of the Century Club at New York (p. 24) and frequent art exhibitions; *Union* (Pl. C, 3), 8 Park St.; *Temple*, 74 Boylston St.; *Puritan* (Pl. 18; B, 4), cor. of Beacon and Spruce Sts.; *University* (p. 267); *City Club* (Pl. C, 3), cor. of Beacon and Somerset Sts. (3000 members); *Technology*, 83 Newbury St.; *Elysium*, 218 Huntington Ave. (Hebrew); *Tavern Club* (Pl. 20; C, 4), 4 Boylston Place; *Authors' Club*; *Boston Art Club* (p. 267); *20th Century Club*, 3 Joy St., with weekly lectures on questions of social interest; *Exchange Club*, 22 Batterymarch St.; *Turnverein*, 29 Middlesex St., German; *Boston Athletic Association* (p. 267); *Tennis & Racquet Club* (Pl. 19; A, 6), 939 Boylston St.; *Mayflower Club* (for ladies), 6 Park St. (Pl. C, 3); *College Club* (for graduates of women's colleges), 41 Commonwealth Ave.; *New England Women's Club*, Huntington Ave.; *Press Club*, 156 A Tremont St.; *Women's Press Club*; *Appalachian Mt. Club* (p. 320). Tremont Building (p. 270); *Camera Club*, 50 Bromfield St.; *New Riding Club*, 52 Hemenway St., near Back Bay Park; *Boston Driving Club*, Charles River Speedway (p. 273); *Massachusetts Automobile Club*, 761 Boylston St.; *Country Club*, Clyde Park, Brookline; *Union Boat Club*, foot of Chestnut St.; *Victorian Club*, for British residents (meetings at the Hotel Westminster). — Among the *Dining Clubs*, which are a characteristic Boston institution, are the *Saturday Club* and the *Papyrus*, besides several of a political, commercial, or professional complexion; other good clubs, meeting at the members' houses or elsewhere, are the *Wednesday Evening Club* (founded 1777), the *Thursday Evening Club*, the *Saturday Morning Club* (women), and the *Round Table* (sociological).

Tourist Agents, *Raymond & Whitcomb Co.*, 306 Washington St.; *Thos. Cook & Son*, 332 Washington St.

Post Office (Pl. C, 3), Devonshire St., open from 7.30 a.m. to 7.30 p.m., Sun. 9-10 a.m. (p. 262). *Branch Offices* at Copley Sq. (p. 263), at Washington St., cor. of Brookline St. (Pl. C, 6), Massachusetts Ave., cor. of Boylston St. (Pl. A, 6), etc.

Consuls. British, *Mr. Frederick Leay*, 247 Atlantic Ave. (Pl. D, 2); German, *Mr. W. Th. Reincke*, 70 State St.

Booksellers. *Old Corner Book Store*, 27 Bromfield St.; *Clarke*, 28 Tremont St.; *De Wolfe, Fiske, & Co.*, 20 Franklin St.; *Little, Brown, & Co.*; *C. E. Lauriat & Co.*, these two in Washington St. (Nos. 254, 385); *Schoenhof, Ritter & Flebbe*, these two (for foreign books) in Tremont St., Nos. 128 A & 149 A.

Bibliography. An excellent popular account of Boston is *M. A. De Wolfe Howe's* 'Boston: the Place and the People' (1903). See also *Edwin M. Bacon's* 'Boston, a Guide Book' (new ed., 1907) and 'Walks and Rides about Boston' ($ 1.25); *Henry Cabot Lodge's* 'Boston' ('Historic Towns Series'), and *S. A. Drake's* 'Old Landmarks and Historic Personages of Boston'.

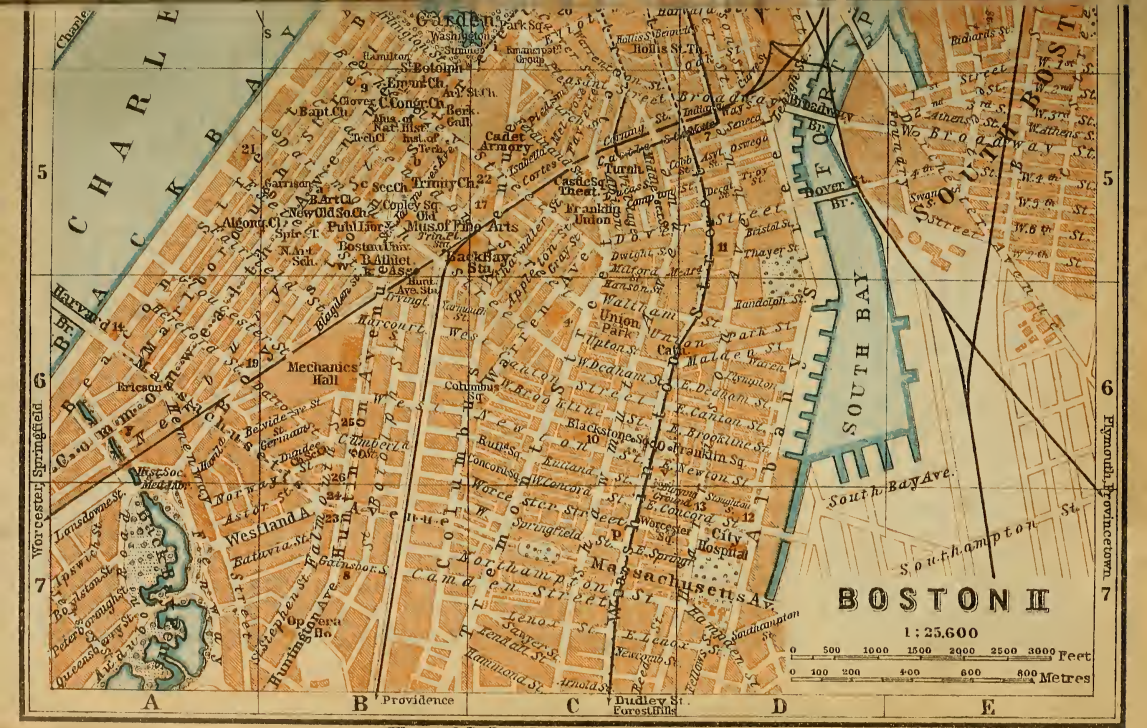
Boston, the capital of Massachusetts, the chief town of New England, and one of the oldest and most interesting cities in the United States, lies at the head of *Massachusetts Bay*, about 200 M. to the N.E. of New York. Boston proper occupies a peninsula between the Charles River and the arm of the bay known as *Boston Harbour* and was originally founded on three hills, *Beacon*, *Copp's*, and *Fort*, which, however, have been materially cut down. The city limits also include *East Boston*, on *Noddle's* or *Maverick Island*, on the other side of the harbour; *South Boston*, separated from the old city by an arm of the harbour; *Charlestown*, on the other side of the river; and the suburban districts of *Brighton* (W.), *Roxbury* (or *Boston Highlands*), *West Roxbury* (including *Jamaica Plain*), and *Dorchester* (S.). Boston is connected with the city of Cambridge (p. 270) by

several bridges across the Charles. The old town is cramped and irregular, and its streets are narrow and crooked; but the new parts, especially the so-called *Back Bay* (p. 268), formed by filling in the tide-water flats on the Charles, are laid out on a very spacious scale. The chief retail business-streets are *Washington Street* and *Tremont Street*. Among the finest residence streets are *Commonwealth Avenue* (p. 267), *Beacon Street* (p. 268), *Marlborough Street*, *Mt. Vernon Street*, and *Bay State Road*. A characteristic feature of the residence quarters is seen in the luxuriant vines of 'Boston ivy' *(Ampelopsis Veitchii)*, which cover many of the buildings (especially beautiful in autumn). The population of Boston in 1905 was 595,380, including a large proportion of Irish Roman Catholics.

History. The Indian name of the peninsula on which Boston lies was *Shawmut* ('Sweet Waters'), and the early colonists called it *Trimountaine* or *Tremont*. The first English settler was a recluse Anglican clergyman, the *Rev. William Blaxton* or *Blackstone* (ca. 1623), but soon after the arrival of the Salem Colonists, who migrated to this peninsula in 1630 (see p. 281), he transferred his rights to them (1634) for 30*l.* and moved into the wilderness (comp. p. 245). The new settlers named the place *Boston* in honour of the native city of some of their leaders, and Gov. Winthrop made it the capital of the colony. The little town increased with some rapidity and soon carried on a considerable sea-going trade (first wharf built in 1673). In the middle of the 18th cent. Boston was probably the largest and most important town in America, containing about 25,000 inhab., and outstripping New York and Philadelphia. The first American newspaper ('Boston News Letter') was published here in 1704. Boston's share in the Revolution is well known. The 'Boston Massacre' (see p. 262) occurred on March 5th, 1770, and the 'Boston Tea Party' on Dec. 16th, 1773 (comp. pp. 263, 270). During the war Boston was occupied by British troops, but on March 4th, 1776, Washington crossed from Cambridge, took possession of *Dorchester Heights* (now a part of South Boston, p. 257), and compelled the evacuation of the city (March 17th). Since the Revolution Boston's upward course has continued steadily, with a few interruptions, of which the embargo of 1807-15 was perhaps the most important. It received its city charter in 1822, having then a population of about 50,000. In 1840 this number had risen to 93,383, in 1860 to 177,840, in 1880 to 362,839, and in 1900 to 560,892. In 1872 the chief business portion of the city was devastated by a fire, which destroyed property to the value of $ 70,000,000 (14,000,000*l.*). From 1830 to 1860 Boston was the headquarters of the Abolitionist Party, led by *William Lloyd Garrison* (p. 283; tablet on office of 'The Liberator', N.E. cor. of Congress & Water Str., comp. Pl. C 3) and *Wendell Phillips* (house in Essex St., cor. of Harrison Ave., comp. Pl. C 4; tablet).

It is of great interest to study a plan of Boston, showing the original area of the peninsula and the extent to which it has been increased by filling in the tidal flats all round it (see, e. g., *M. Howe's* 'Boston'). This process has more than doubled the area of the peninsula (780 acres; now about 1830 acres), while the total area now comprised within the municipal limits is over 27,000 acres (43 sq. M.). The hills have been partly levelled, and indeed the whole face of the ancient city has been entirely altered, with the exception of three old burial-grounds and a few buildings. The original peninsula was connected with the mainland on the S. by a narrow 'Neck', little wider than the present Washington St., which runs along it. Boston has often been described as the most English of American cities, and in many respects this is true, though it must not be understood to indicate a conscious or voluntary imitation of English standards. Mere wealth probably counts for less in Boston than in any other large American city. As a literary centre Boston was long supreme in the United States and still disputes the palm with New York. A list of its

EAST BOSTON
CHARLESTOWN
CHARLES RIVER
BOSTON HARBOR
EAST CAMBRIDGE
1. Advent Church B.4.
2. Boston Athenaeum C.3.
3. Bowdoin Sq. Theatre C.3.
4. Boys' Engl. & Latin Sch. C.6.
5. Chamber of Commerce D.2.
6. Christ Church C.2.
7. Columbia Theatre D.5.
8. Conservat. of Music B.7.
9. First Unit. Church B.5.
10. Girls' High & Latin Sch. C.6.
11. Grand Opera House D.5.
12. Homoeopathic Hospit. D.7.
13. Immac. Concept., Ch. of D.7.
14. Mt Vernon Church A.6.
15. Old South Meeting H. C.3.
16. Palace Theatre C.3.
17. Pope Cycling Co. C.5.
18. Puritan Club B.4.
19. Racquet Club A.6.
20. Tavern Club C.4.
21. University Club A.5.
22. Youth's Comp. Build. C.5.
23. Symphony Hall B.7.
24. Horticultural Hall B.7.
25. Potter Hall (New Century Bldg.) B.6.
26. Chickering Hall B.6,7.
27. Colonial Theatre C.4.
South Union Station
Mass. General Hospital
State Prison
Cambridge Bridge
Old Ladies' Home
Somerset Club
Elevator


BOSTON II
1:25,600
0 500 1000 1500 2000 2500 3000 Feet
0 100 200 400 600 800 Metres
Elevated Railroad.
Subway.
Wagner & Debes' Geogr. Estab. Leipzig
Worcester Springfield
Plymouth Provincetown
Providence
Dudley St.
Forest Hills
Boston Common
Public Garden
Back Bay
South Bay
Charles River
Back Bay Fens
South Boston
Harvard Br.
Longfellow Br.
Broadway Br.
Dover St. Br.
Mechanics Hall
Symphony Hall
Trinity Ch.
Old South Ch.
Public Library
Museum of Fine Arts
Boston Univ.
Boston Lyric
Tremont Temple
Park St. Ch.
Union Park
Franklin Square
Worcester Square
Concord Square
Rutland Square
Blackstone Square
Franklin Square
Hollis St. Ch.
Berk. Chambers
Castle Square Theat.
Franklin Union
Armory
Turnh.
Hollis St. Th.
Bay State Road
Commonwealth Avenue
Beacon Street
Boylston Street
Tremont Street
Washington Street
Columbus Ave.
Huntington Ave.
Massachusetts Ave.
Harrison Ave.
Shawmut Ave.
Albany Street
Dover Street
Broadway
Dorchester Ave.
Southampton Street
Northampton Street
Springfield Street
Worcester Street
Concord Street
Waltham Street
Union Park Street
Appleton Street
Clarendon Street
Dartmouth Street
Exeter Street
Berkeley Street
Fairfield Street
Gloucester Street
Hereford Street
Massachusetts Av.
Columbus Av.
Harrison Av.
Shawmut Av.
Albany Street
Dover Street
Broadway
Dorchester Av.
South Bay Ave.
Southampton St.
Plymouth Br.
Worcester Sq.
City Hospital
Opera Ho.
Eliot Norton Sch.
Mass. Inst. Tech.
Boston Latin Sch.
Girls' High Sch.
Normal Sch.
Art Mus.
Old Cor.
Trinity Ch.
Clarendon St. Bapt. Ch.
Church of the Immaculate Conception
Church of the Advent
Church of the Unity
Church of the Disciples
Church of the Paulist Fathers
Church of the Holy Cross
Church of the Messiah
Church of the Redemption
Church of the Saviour
Church of the Ascension
Church of the Epiphany
Church of the Good Shepherd
Church of the Holy Trinity
Church of the Holy Spirit
Church of the Holy Name
Church of the Holy Rosary
Church of the Holy Family
Church of the Holy Angels
Church of the Holy Innocents
Church of the Holy Martyrs
Church of the Holy Confessors
Church of the Holy Virgins
Church of the Holy Widows
Church of the Holy Orphans
Church of the Holy Strangers
Church of the Holy Pilgrims
Church of the Holy Wanderers
Church of the Holy Exiles
Church of the Holy Captives
Church of the Holy Prisoners
Church of the Holy Martyrs
Church of the Holy Confessors
Church of the Holy Virgins
Church of the Holy Widows
Church of the Holy Orphans
Church of the Holy Strangers
Church of the Holy Pilgrims
Church of the Holy Wanderers
Church of the Holy Exiles
Church of the Holy Captives
Church of the Holy Prisoners

distinguished literary men would include *Hawthorne*, *Emerson*, *Longfellow*, *Holmes*, *Lowell*, *Everett*, *Agassiz*, *Whittier*, *Motley*, *Bancroft*, *Prescott*, *Parkman*, *Ticknor*, *Channing*, *Theodore Parker*, *Henry James*, *T. B. Aldrich*, and *Howells* among the names more or less closely associated with Boston. *Samuel F. Smith* (1808-95), author of 'America', was born at 37 Sheafe St. (Pl. C, 2; tablet). Among the most eminent of its sons in other spheres are *Benjamin Franklin* (born in 1706 at No. 17 Milk St., the site of which is now covered by an office-building, with a bust of Franklin). *Daniel Webster* (138 Summer St.; inscription), *Samuel Adams* (b. in 1722 at 262 Purchase St., Pl. D 3; lived at corner of Winter St. and Winter Place, Pl. C 3; tablets; comp. also below), and *Charles Sumner* (20 Hancock St.). *Paul Revere* (see below) lived at No. 19 North Sq. (Pl. C, 2; tablet). *Prescott* wrote his 'Conquest of Peru' and 'Philip II.' at No. 55 Beacon St., where he spent the last 14 years of his life; and *George Ticknor* occupied part of the house at the corner of Park St. and Beacon St. where *Lafayette* lodged in 1824. The *Atlantic Monthly* is published at Boston (4 Park St., formerly the home of Josiah Quincy, p. 273).

Commerce and Industry. Boston is, perhaps, the wealthiest city in America in proportion to population. Its total valuation in 1907 was $ 1,313,470,556 (262,694,111*l.*). Boston capital has been very largely instrumental in the development of the West. Its foreign commerce is very extensive; the total value of its exports in the calendar year 1907, was $ 104,611,089, of its imports $ 123,411,169. Among the chief articles are grain, live-stock, cotton, provisions, hemp, fish, wool, sugar, hides, chemicals, and coal. In the same year its harbour was entered and cleared by 2808 vessels (exclusive of coasters), of 5,139,152 tons burden. Its manufactures are very varied, employing (1905) 58,160 hands and producing goods to the value of $ 184,351,163. Among the staples are leather, boots and shoes, hardware, machinery, sugar, and cotton. As a wool market, Boston is second to London alone, handling nearly 1,000,000 bales annually.

***Boston Common** (Pl. B, C, 3, 4), a park of 48 acres in the heart of the city, shaded by fine elms and other trees and crossed by many pleasant walks, has been reserved for public use since 1634 and is carefully guarded for this purpose in the charter of 1822. Perhaps no other city-park in the world is more closely entwined with the historic interests and warm affections of the surrounding population.

The *Soldiers' Monument*, on a hill near the centre of the Common, was designed by Martin Milmore and erected in 1871-77. It stands near the site of the *Old Elm*, which was older than the city and was blown down in 1876. Adjacent is the so-called *Frog Pond*. On the Mall abutting on Tremont St. is a monument in memory of *Crispus Attucks* and others killed in the *Boston Massacre* (p. 262). The 'Long Path' (see 'The Autocrat of the Breakfast Table') extends from Joy St. (Pl. C, 3) to Boylston St. (Pl. C, 4). Near Park St. (N. end of the Common) is the *Brewer Fountain*. — Open-air concerts are given on the Common on Sun. afternoons in summer.

On the S. side of the Common is the *Central Burying Ground* (Pl. C, 4), laid out in 1756 and containing the graves of Gilbert Stuart (1754-1828; pp. lxxxi, 243), the portrait-painter, and Julien (d. 1805), the restaurateur (after whom the well-known soup is named). — To the N.E. of the Common, adjoining Tremont St., is the **Old Granary Burial Ground** (Pl. C, 3), which contains the graves of several early governors of Massachusetts, the parents of Benj. Franklin, the victims of the Boston Massacre (p. 262), *Samuel Adams* (1722-1803; see above), *John Hancock* (1737-93), *Paul Revere* (1735-1818; see above), *James Otis* (1725-83), and other Boston worthies (permit at the City Hall).

On the S.W. side the Common is bounded by Charles St., on the other side of which is the ***Public Garden** (Pl. B, C, 4), 24 acres in extent, the site

of which half-a-century ago was a tidal flat. The show of flowers here in spring and summer is very fine. Among the monuments in the Public Garden are an equestrian **Statue of Washington*, by Ball, statues of *Edward Everett* (1794-1865; by Story), and *Sumner* (1811-74; by Ball), and a group commemorating the *Discovery of Ether*, by J. Q. A. Ward. — At the S.W. corner of the Public Garden stands a bronze statue of *Dr. William Ellery Channing* (1780-1842), by Herbert Adams, with a carved canopy by Vincent C. Griffith. Immediately opposite is the **Arlington Street Church** (Pl. B, 5), built in 1859, by the congregation of which Dr. Channing (p. 249) was pastor from 1803 till his death (good stained glass).

That part of the Common adjoining Tremont St. and known as the *Tremont St. Mall* is now occupied by eight small buildings covering the staircase entrances to the stations of the ***Subway**, a wonderful piece of engineering designed to facilitate traffic by affording an underground passage for the electric cars. The subway was constructed in 1895-98 at a cost of about $ 4,165,000.

The main subway extends from the junction of Tremont St. and Shawmut Ave. (Pl. C, 5) to (1⅓ M.) the N. Union Station (Pl. B, 2), passing below Tremont St., Scollay Sq. (Pl. C, 3), and Haymarket Sq. (Pl. C, 2). A branch-subway, beginning at the S. corner of the Public Garden (Pl. C, 4), runs under Boylston St. to the corner of Tremont St. (Pl. C, 4), and extends under Tremont St. to Park St. Some sections are constructed of steel, embedded in cement, with arches of brick or concrete; other sections are of masonry. The interior at the stations is lined with glazed white brick. At Tremont and Boylston Sts. is a 'sub-subway', one track passing below another, and at other points there are four tracks. — The *East Boston Tunnel* (see p. 256) is about 1½ M. long, of which upwards of a third is under water. Its diameter is 23⅔ ft., or about the same as that of the Blackwall Tunnel under the Thames, and its approximate cost was $ 3,000,000 (600,000*l.*). — The *Washington Street Tunnel* (see p. 256), constructed at a cost of $ 5,500,000 and opened in 1908, extends from Haymarket Sq. (Pl. C, 2) to Broadway (Pl. C, 5), a distance of about 1⅕ M. At Adams Sq. (Pl. C, 3) it passes below the Subway, and it also passes under the East Boston Tunnel.

Near the N.E. angle of the Common, on *Beacon Hill*, stands the ***State House** (Pl. C, 3), an imposing building surmounted by a huge gilded dome (open to visitors except when the Senate sits; *View) and preceded by a Corinthian portico and a flight of steps. The architect of the original building facing Beacon St., of which the general appearance has been preserved, was *Charles Bulfinch* (1795). It was, however, enlarged in 1853-56; and another huge extension, much larger than the original erection, was accomplished in 1889-98. The architecturally not very successful new part consists mainly of yellow brick with trimmings of white marble and numerous columns and pilasters. The whole building is now 462 ft. long, 172-212 ft. wide, and 108 ft. high (to top of lantern on dome, 155 ft.). On the terrace in front are statues of *Daniel Webster* (1782-1852) and *Horace Mann* (1796-1859). The dome is illuminated at night.

Interior. We first enter the *Doric Hall*, containing statues of Gov. Andrew (by Ball) and George Washington (by Chantrey), and various historical relics. Directly to the N. is the grand staircase of pavonazzo marble, with twelve fine Ionic columns on its balcony. The paintings on the N. wall are by Robert Reid. Beyond the staircase is the handsome **Memorial Hall*, which contains a collection of flags carried by Massachusetts regiments in the Civil War, historical paintings by H. O. Walker (N. & S. panels) and Edward Simmons (E. & W. panels), a statue of Gen. Bartlett

by Dan. French (1904), etc. — On the third floor, at the head of the staircase, is a Memorial to Governor Roger Wolcott (1847-1900), by D. C. French and H. Bacon (1906). On the S. side of this floor is the *Senate Chamber*, with Doric columns, and adorned with busts of Washington, Lincoln, Sumner, Franklin, Lafayette, and other eminent men. — The *Senate Reception Room* (S.E. corner), of Ionic design, has portraits of twenty governors and relics of the War of the Revolution. — The *House of Representatives*, a handsome elliptical chamber (W. side), is finished in white mahogany. Opposite the Speaker's chair, between two columns, hangs a codfish, an emblem of one of the former chief sources of the State's prosperity. — Also on the W. side is the *Council Chamber*, of the Corinthian order. — At the N. end of the building is the fine *State Library* (140,000 vols.), the chief treasure of which (exhibited under glass) is the 'History of Plimoth Plantation', generally known (erroneously) as the 'Log of the Mayflower', written with his own hand by William Bradford, Governor of Plymouth Colony (1589-1657). — Among the other fine apartments shown to visitors are the *Governor's Room* and the *Reading Rooms* of the Senate and the House of Representatives. Comp. handbook by *E. M. Burrill* (25c.).

On the E. side of the new part of the State House a small park has been laid out. Here has been erected a reproduction of the *Beacon Monument*, raised in 1790 on the site of the old Beacon (1635) to commemorate the success of the Revolution and removed in 1812. The bronze tablets belonged to the first monument. Here also stand a statue of *General Charles Devens*, by Olin Warner, and, at the Beacon St. corner, an equestrian statue of *Major-General Joseph Hooker*, by D. C. French.

In Beacon St., opposite the State House, is the beautiful ***Shaw Monument**, by *Augustus Saint-Gaudens*, erected in 1897 in honour of Col. Shaw and his regiment (the first coloured regiment raised in the Civil War). This is probably the first instance of a relief placed as a monument by itself instead of against a building.

In Beacon St., just below the State House, stood the old *Hancock Mansion* (site indicated by a tablet on the balustrade).

We now follow Beacon Street towards the N., passing (left), at the corner of Bowdoin St., the *Unitarian Building* (Pl. C, 3), the headquarters of the American Unitarian Association, opposite which is the *Congregational Building* (1898). Adjoining the latter is the ***Boston Athenaeum** (Pl. 2; C, 3), an institution founded in 1807 and now containing a library of 220,000 vols. (open to members only). — In Somerset St., which diverges to the left, is the *New England Historic-Genealogical Society*, with valuable collections of books and MSS. (9-5). Here, too, is the back of the **New County Court House** (Pl. C, 3), a massive granite building in the German Renaissance style, the front of which faces Pemberton Square. The building is 450 ft. long. The imposing central hall is adorned with emblematic figures by *D. Mora*, a statue of Rufus Choate (1799-1859) by *Dan. French*, etc.

We, however, proceed to the right, through *School Street*, in which, to the left, at the corner of Tremont St., stands *King's Chapel* (Pl. C, 3), built in 1754 on the site of the first Episcopalian church of Boston (tablet to Oliver Wendell Holmes inside, on the

N. wall). The adjoining burial-ground, the oldest in Boston, contains the graves of *Gov. Winthrop* (1588-1649) and other worthies. In School St., to the left, is the **City Hall** (Pl. C, 3), behind which is the *Old Court House* (Pl. C, 3). In front of the City Hall are statues of *Franklin* (1706-90), by Greenough, and *Josiah Quincy* (1772-1864; mayor for six years in succession), by Ball.

School St. ends at the large *Old South Building* (offices) in Washington Street (Pl. I, F-B, 3-9; II, C D, 2-7), the most crowded thoroughfare in Boston, with many of the best shops. Following Washington St. ('Newspaper Row') to the left, we soon reach, at the corner of State St., the ***Old State House** (Pl. C, 3), dating from 1748 and restored as far as possible to its original appearance, even to the figures of the British lion and unicorn on the roof.

The 'Boston Massacre' (p. 258) was the result of an encounter between a British sentry here and the crowd. The rooms, including the old *Council Chamber* and *Hall of Representatives* on the upper floor, contain a collection of historical relics and paintings (9.30-4.30; free). On the top-floor is the Curtis Collection of Photographs of Ancient Boston Buildings. The main facts of the building's history are given in appropriate inscriptions.

The rooms are in the guardianship of the *Bostonian Society* (offices on groundfloor). — Below the basement is a station of the *East Boston Subway*.

State Street (Pl. C, D, 3, 2), the centre of financial life, leads hence to the E., past the *Exchange Building* (with the *Stock Exchange*) and other large office-buildings, to the **Custom House** (Pl. D, 2), a massive granite building in the shape of a Greek cross, with a dome. State St. ends at *Atlantic Ave.* and *Long Wharf* (Pl. D, 2).

'*T Wharf*' (Pl. D, 2), a little farther to the E., presents an interesting sight in winter when the fishing-schooners come in covered with ice.

Change Alley (now inappropriately styled 'Avenue'), diverging to the left from State St., leads to ***Faneuil Hall** (Pl. C, 2, 3; open 9-5), the 'cradle of American liberty', originally presented to the city in 1742, by Peter Faneuil, a Huguenot merchant, but rebuilt after a fire in 1761 and reconstructed on the original plan in 1898.

The Hall proper, on the upper floor, is 76 ft. square. It is used for public meetings and was the scene of numerous important gatherings in Revolutionary, Abolition, and later times. The British officers used it as a theatre in 1775-76. It contains a large picture by Healy (Webster addressing the Senate) and portraits of eminent Americans (copies). — The floor above the hall is occupied by the *Ancient and Honorable Artillery Co.*, the oldest military organization in the country (1638; comp. *Baedeker's London*), with a military museum (open 10-4, except Sat. and Sun.; free).

Adjacent is *Quincy Market* (Pl. C, 2), a crowded and busy scene in the morning from 9 to 11. — The *Chamber of Commerce* (Pl. 5; D, 2), built in 1902, is in India Street.

Devonshire Street leads to the right (S.) from State St. to the **Government Building** (Pl. C, 3), a huge edifice by *Mullet*, in his usual Mansard-roof style, occupying the entire block between Milk St., Devonshire St., Water St., and Post Office Sq. The *Post Office* occupies the groundfloor, the basement, and part of the first floor, while the rest of the building is devoted to the *U. S. Sub-Treasury* (10-2) and the *U. S. Courts* (2nd floor). The allegorical groups above the main entrance are by *D. C. French*.

The Post Office, though it itself escaped, adjoins the district destroyed by the fire of 1872 (p. 258) and now covered with substantial business blocks. The financial quarter is crowded into the small territory bounded by *State*, *Washington*, *Milk*, and *Broad Sts.* (Pl. C, D, 3); the wool trade is centred in *Federal St.*, *Atlantic Ave.*, and the extension of *Summer St.* (Pl. D, 3); the leather and boot and shoe trade spreads over *Lincoln* and *South Sts.* (Pl. D, 4), and also part of *Pearl St.* (Pl. D, 3) and *Atlantic Ave.* (Pl. D, 2, 3); while the wholesale dry-goods business affects *Winthrop Sq.* and *Franklin*, *Chauncy*, *Kingston*, and *Bedford Sts.* (Pl. C, D, 3, 4). The large retail dry-goods stores of Boston rank with those of New York (p. 25). Among the most noted are the *Jordan-Marsh Co.*, the *R. H. White Co.*, *Siegel* (these two with moving stairways), *Filene*, and *Shuman* (Washington St.), *Hollander* (Boylston St.), *Stearns* and *Houghton & Dutton* (Tremont St.), the *Shepard-Norwell Co.* (Temple Place), and *Hovey* (Summer St.).

We now follow *Milk Street* (Pl. C, 3), to the W., back to Washington St. At the corner of Washington St. stands the ***Old South Meeting House** (Pl. 15; C, 3), built in 1729 on the site of an earlier church of wood, which lay near Gov. Winthrop's house.

Benjamin Franklin (p. 259) was baptized in the original church in 1706, and here Judge Sewall made his confession of repentance for his share in the witchcraft delusion of 1692. Some of the most stirring meetings of the Revolutionary times were held here, and from its doors the disguised Bostonians who threw the tea into the harbour in 1773 (pp. xxx, 258, 270) started for their enterprise. The British turned it into a riding-school in 1775, but it was afterwards restored to its sacred uses. The annual Election Sermon was delivered here, with few interruptions, from 1712 to 1872. It barely escaped the fire of 1872 and was afterwards used for a short time as a post-office. It now belongs to a patriotic society and contains an interesting collection of historical relics (9-6; adm. 25 c.).

A tablet on a building farther on, nearly opposite Boylston St. (see below), marks the site of the old *Liberty Tree*, a great rallying point at the time of the Revolution.

Boylston Street (Pl. C-A, 4-6), diverging from Washington St. to the right (W.), skirts the Common and Public Garden and leads to the *Back Bay* (p. 268). To the left, at the end of Columbus Ave., a short distance from Boylston St., we see the tower of what used to be the *Providence Station* (now unoccupied). In front of this building is the *Emancipation Group* (Pl. C, 4), by Ball; the negro is a portrait of Archer Alexander, the last slave captured under the 'Fugitive Slave Law' in Missouri. — At the corner of Berkeley St. (right) stands the **Museum of Natural History** (Pl. B, 5; 9-5, 25 c.; free on Sun., 1-4.30, and on Wed. & Sat., 10-4.30), with a library of 30,000 vols. and good zoological, ornithological, entomological, and mineralogical collections. Opposite are the *Berkeley Galleries Building* and the *Young Men's Christian Association*. Adjacent is the ***Massachusetts Institute of Technology** (Pl. B, 5), the leading institution of the kind on the W. side of the Atlantic (1400 students; fine apparatus and collections). — Opposite is the large *Brunswick Hotel* (p. 254).

Boylston St. now reaches *Copley Square (Pl. B, 5), which offers perhaps the finest architectural group in Boston, including Trinity Church, the Museum of Fine Arts, the Public Library, the Second Church (Unitarian), and the New Old South Church.

***Trinity Church** (Pl. B, 5), on the E. side of the square, the masterpiece of *H. H. Richardson* and a typical example of 'Richardsonian' architecture, is deservedly regarded as one of the finest buildings in America. It was practically completed in 1877 at a cost of $ 800,000 (160,000*l.*); the two W. towers and the admirable carving of the porch (by *Cairns* and *Mora*) date from 1896-98. Its style may be described as a free treatment of the Romanesque of Central France (Auvergne).

The building is in the form of a Latin cross, surmounted by a massive central **Tower*, 210 ft. high, suggested by the lantern of the Old Cathedral of Salamanca (see *Baedeker's Spain*). The interior is very elaborately decorated by La Farge. The **Stained-glass Windows* include fine specimens of La Farge, Burne Jones and William Morris, Henry Holiday, and Clayton & Bell. It is interesting to compare the painted English windows with La Farge's work, in which only the faces and hands are painted, the rest being in coloured glass. Near the chancel are busts of *Dean Stanley* (1815-81) and of the *Rev. Phillips Brooks* (d. 1893; by D. C. French), late Bishop of Massachusetts and rector of Trinity Church for 22 years. [A statue of Bishop Brooks, by *Saint-Gaudens*, is soon to be erected in Copley Sq.] The adjacent *Chapel* is connected with the church by very effective open cloisters, in which is preserved the tracery from a window of the ancient church of St. Botolph, Boston, England.

The ***Public Library** (Pl. B, 5), on the W. side of the square, designed by McKim, Mead, & White and erected in 1888-95, is a dignified, simple, and scholarly edifice, which forms a worthy mate to its vis-à-vis, Trinity Church. Its style is that of the Roman Renaissance. It is 228 ft. long, 225 ft. wide, and 68 ft. high (to the cornice), and encloses an open court, 140 ft. long and 100 ft. wide. The total cost, exclusive of the site, was $ 2,486,000. The library is open to the public, 9 a.m. to 10 p.m. in winter (summer till 9 p.m.; Sun. 2 to 9 or 10). It is one of the largest free libraries in the world (ca. 900,000 vols.), circulating 1,461,403 vols. for home use in 1906.

Exterior. Among the chief features of the exterior are the reliefs over the main entrance (arms of the Library, City, and State; by *Augustus Saint-Gaudens*), the medallions below the cornice representing the bookmarks of famous printers, and the inscribed names of eminent men.

The **Interior* is excellently arranged and equipped and affords accommodation for a million volumes. The *Vestibule*, of Knoxville marble, contains a statue of Sir Harry Vane (1612-62), by MacMonnies. — The *Entrance Hall* has a floor of white marble, inlaid with brass. — The corridor to the right leads to the *Newspaper Reading Room* (350 papers in all languages), the *Periodical Reading Room* (where about 1400 periodicals are displayed), the *Patent Library*, and the *Department of Statistics*. — The left corridor leads to the *Catalogue Room*. — From the Entrance Hall a superb marble **Staircase*, 20 ft. wide, embellished with figures of lions, in Siena marble, by *Louis Saint-Gaudens*, ascends to the first floor. Its windows overlook the **Central Court*, with its turf, fountain, arcade, and open-air walk, to which readers may resort in hot weather. The panels of the staircase-hall contain **Paintings by *Puvis de Chavannes*, representing the Muses greeting the Genius of Enlightenment and figures of Philosophy, Physics, History, Epic Poetry, etc. It is instructive to compare the effectiveness of these works from the hand of an expert with the comparative failure of some of the wall-paintings upstairs, executed by artists whose well-deserved fame is not based on *decorative* painting. — On the first floor is **Bates Hall* (so called in honour of an early benefactor of the library, a member of the firm of Baring Bros.), the great general reading-room, which is 217½ ft. long,

42½ ft. wide, and 50 ft. high. — To the right is the *Delivery Room*, adorned by not very perspicuous scenes illustrating the Quest of the Holy Grail, by *Edwin A. Abbey*. — To the left are the *Children's Rooms* (one with effective ceiling decoration by *John Elliott*) and the *Lecture Hall*. — We now ascend to the second floor, passing a small balcony overlooking Bates Hall. *Sargent Hall* is adorned with somewhat complicated frescoes by *John S. Sargent*, the meaning of which may be deciphered with the aid of keys provided for the purpose. The valuable special collections of the library housed on this floor include the Ticknor Collection of Spanish and Portuguese Books, the Barton Library (with one of the finest existing collections of Shakspeariana, including both the early folios and the early quartos), the Bowditch Mathematical Library, the Prince Library (MSS. and early New England books, including two copies of the Bay Psalm Book, see p. 50, and Eliot's Indian Bible, 1663-85), the Barlow Library (Americana; including a Latin copy of the letter of Columbus to the King and Queen of Spain in 1493), the John Adams Library (2800 vols.), the Franklin Collection, the collection of works on early American history, the John A. Lewis Library (including many early books printed in Boston), the Galatea Library (books on the history of women), the Codman Library (works on landscape gardening), the Artz Library of American first editions, and the Tosti Collection of Engravings. The *Allen A. Brown Library of Music* (10,800 vols.; catalogue $ 2) occupies a separate room. Another is devoted to *Art*, where rare and illuminated MSS. are sometimes exhibited.

The *Second Church* (Pl. B, 5), rebuilt on its present site on the N. side of Copley Sq. in 1873-74, was the church of the three Mathers (p. 269) and of Ralph Waldo Emerson (1829-32).

The ***Museum of Fine Arts** (Pl. B, 5), on the S. side of Copley Sq., a structure of red brick, with terracotta details, contains some valuable collections (open daily 9 to 4 or 5, Sun. 12-5; adm. 25 c., free on Sat. & Sun.; admirable Handbook of the Museum 50 c.; separate sections 15 c. each). Director, *Mr. Arthur Fairbanks*. In 1907 the total number of visitors was 259,566. — As the collections are to be removed to the new building (see p. 268) in 1909, we here merely enumerate the chief features of interest without any attempt to indicate the position of the various exhibits. The service of a 'Docent', who will explain the objects shown, may be obtained (gratis) on application at the desk in the entrance-hall.

The **Collection of Casts** is surpassed in importance by those of Berlin, Dresden, and Strassburg only. — The **Collection of Greek and Roman Sculptures**, though not large, contains some very choice pieces. Among those acquired mainly with the bequest of Mrs. Perkins and the Henry L. Pierce fund are the following: *Hermes (torso and head); *Torso of a goddess, an original Greek work; *Ideal Greek head (ca. 380 B.C.); two fine heads of Augustus (one the so-called 'Despuig' head); *Head of Alexander the Great; Head of Zeus (4th cent. copy of the Olympian Zeus of Phidias); part of an archaic stele (5th cent. B.C.); Roman portrait-head of Corbulo; Young Apollo, marble statue, the arms wanting, the feet restored (probably a Roman copy of a Greek original); Archaic lion in red sandstone; head of a Greek poet (Menander?); head of a goddess from Alexandria (late-Greek); Roman terracotta portrait *Head (evidently produced by the use of a life mask); torso of a youth, probably a copy of a lost Polycletus (5th cent. B.C.); torso of a female figure, Greek (3rd cent. B.C.); Attic grave monument (ca. 400 B.C.) in the form of a vase; **Head of Homer; a group of Leda and the Swan (5th-4th cent. B.C.). Every object in the **Francis Bartlett Collection* of Greek marbles, bronzes, terracottas, etc., merits careful inspection. The following may be selected for special attention: lower half of a draped female figure, probably a Greek work of the 4th cent.

B.C.; interesting little figure of a Weeping Siren, originally part of a gravestone decoration; *Head of Aphrodite, evidently belonging to the School of Praxiteles, and dating not later than the 4th cent. B.C.; fragment of a Mounted Amazon, early 4th cent. B.C.; fragmentary *Figure of a seated woman, of later period than the other sculptures; *Louter, or bath-basin, a fine and probably unique example of archaic Greek bronze-work of the 6th cent. B.C. The *Collection of Greek Vases* contains some fine specimens, including an Athenian *Cratera* (ca. 470 B.C.), with scenes from the Trojan War. The other classical collections include *Coins, Gems, Greek Terracottas, *Arretine Ware* (ranking second among the world's collections), *Roman Glass*, and *Greek and Etruscan Mirrors* and *Gold Ornaments* (including a famous *Cameo*, the Nuptials of Cupid and Psyche, from the Marlborough Collection). — The *Etruscan Sarcophagi* and *Cypriote Antiquities* may also be noted. — The **Egyptian Antiquities** include stone vases of the Old Empire, a portrait-head of the 4th Dyn. (in limestone), a golden statuette of Herishef, a royal scarab of Sethos I. (19th Dyn.), and a *Priest's robe of leather, from Thebes (ca. 1500 B.C.).

The **Collection of Paintings** includes many which are on loan and frequently changed. Among the works by Old Masters are the following: *Vivarini*, Saints (on panel); *Van Dyck*, Portrait of Anna Maria de Schodt; *Rembrandt*, *Study of his father, Danaë, and *Portraits of Dr. Nicholas Tulp and his wife; *Rubens*, Marriage of St. Catharine, study for the altar-piece in the Augustine Church, Antwerp; *Jac. van Ruysdael*, Landscape; *P. de Hoogh*, Interior; *W. van de Velde*, Sea-piece; *N. Maas*, Jealous husband; *Metsu*, Usurer; *Hals*, Portrait of a lady; *Teniers*, Butcher's shop; *Van der Weyden*, *St. Luke drawing the Madonna; *Flemish School*, *Madonna and Child; *Crivelli*, Pietà; *Wohlgemuth*, Death of the Virgin; *Moroni*, Portrait; *Velazquez*, Philip IV., *Don Balthazar Carlos and his dwarf; *Veronese*, Justice; *Ribera*, Philosopher; *Van Goyen*, River-scene; *Hondecoeter*, Barnyard fowl; *Sano di Pietro*, Madonna and saints; *Bartolo di Fredi* (14th cent.), Altar-piece; *Goya*, Portrait of the artist's son; *Van Santvoort*, Portrait of a lady.

The paintings of the early American School include works by *Washington Allston*, *Gilbert Stuart*, *Copley*, *Trumbull*, *Benjamin West* ('King Lear'), *John Smybert*, *Wm. Page*, etc. The unfinished portrait of Washington is one of the three portraits of Washington painted by Stuart from life. Martha Washington and Washington at Dorchester Heights are also by Stuart. There are many other interesting portraits.

The paintings of the modern American School include specimens of *Elihu Vedder*, *Brush*, *Thayer*, *Whistler* ('Little Rose', 'The Blacksmith', and two others), *Winslow Homer*, *Alexander*, *Dennis Bunker*, *Inness*, *W. M. Hunt*, *Joseph de Camp*, etc.

The modern paintings other than American consist at present chiefly of works of the Early English and the French Schools. Among these are paintings by *Turner* ('Slave-ship and another landscape), *Reynolds*, *Lawrence*, *Richard Wilson*, *Constable*, *Nattier*, *John Crome*, *Charles R. Leslie*, *Raeburn*, *John Opie*, *Bonington*, *Chardin* (still-life piece), *Duplessis* (original portrait of Franklin), *Corot*, *Regnault*, *Rousseau*, *Troyon*, *Meissonier*, *Millet* ('The Reapers), *Delacroix*, *L'Hermitte*, *Gérôme* ('L'Eminence Grise'), *Dias*, *Degas*, *Monet*, *Dupré*, *Decamps*, *Couture*, *Daubigny*, *Henri Lerolle*, *Léon Bonnat*, etc. — The collection of *Water Colours and Drawings* includes 21 drawings and water-colours by *J. F. Millet* and 27 water-colours by *Wm. Blake*. — The Museum possesses about 70,000 *Prints and Drawings*.

The **Morse Collection of Japanese Pottery** (illustrated catalogue $ 20) is the finest in existence, and the collections of *Japanese Armour, Paintings, Prints, Lacquer, Ivory and Wood Carvings*, and *Metal Works* are also very valuable. — Other extensive collections are those of *Majolica, Fayence, Sèvres and English China, Indian and Mexican Pottery, German and Venetian Glass, Chinese and Japanese Porcelain, and Enamels*. — The *Bigelow Collection of Amber* deserves special notice. — The *Textile Collections* contain tapestries from Egypt, Peru, France, Flanders, China, and Japan, brocades, velvets, and embroideries from Europe and Asia, laces, and Oriental rugs.

Visitors wishing information about the collections or desiring to see objects not on exhibition are welcome in the offices of the departments.

The *School of Drawing and Painting* connected with the Museum has about 250 students. — The *Art Library* contains books and photographs.

The ***New Old South Church** (Pl. B, 5), so called as the successor of the Old South Church (p. 263), is a fine building in an Italian Gothic style, with a tower 248 ft. in height. It was built in 1874-75. The marbles and ornamental stone-work are fine.

Among other noteworthy buildings in this part of the city are the *Boston Art Club* (Pl. B, 5), at the corner of Newbury and Dartmouth Sts. (pp. 256, 257); the *Boston Athletic Association* (Pl. B, 5; p. 251), Exeter St.; the *University Club* (Pl. 24; A, 5), 270 Beacon St.; the general building of *Boston University* (Pl. B, 5; 1400 students), at the corner of Exeter and Boylston Sts. (Law School in Ashburton Place, Divinity School in Mt. Vernon St., Pl. B, 3, 4); the **First Baptist Church* (Pl. B, 5), at the corner of Clarendon St. and Commonwealth Ave., generally known as the *Brattle Square Church*, a fine building with a Florentine tower by H. H. Richardson, embellished with bas-reliefs and figures of angels; the **Central Congregational Church* (Pl. B, 5), Berkeley St., a beautiful building, with fine stained-glass windows; the **First Unitarian Church* (Pl. 9, B 5), Berkeley St., cor. of Marlborough St., with tablets in memory of its four founders and an old silver chalice given by Governor Winthrop (one of the founders) in 1633; *Emmanuel Church* (Pl. B, 5), Newbury St., the scene of the Rev. Dr. Worcester's experiments in 'psychotherapy'; the *Normal Art School* (Pl. B, 5), at the corner of Newbury and Exeter Sts.; the *Horace Mann School for the Deaf*, Newbury St.; the *Spiritual Temple* (Pl. B, 5), at the corner of Newbury and Exeter Sts.; *The First Church of Christ, Scientist* (Pl. B, 6; services on Sun. at 10.45 a.m. and 3 p.m., on Wed. at 7.30 p.m.; church shown to visitors on Wed. and Frid. 10-5, Mrs. Eddy's room on same days 2-4 and after Sun. services), an unusual but imposing building with a fine dome, at the corner of Norway and Falmouth Sts.; and the *Mt. Vernon Church* (Pl. 14; A, 6), with a good memorial window by La Farge, at the corner of Beacon St. and Massachusetts Ave.

Huntington Avenue (Pl. B, 5-7), which diverges to the left from Boylston St. at Copley Sq., also contains many important buildings. To the right, a short way beyond the railway, is the huge building of the *Massachusetts Charitable Mechanic Association*, usually known as *Mechanics' Hall* (Pl. B, 6; p. 256). A little way farther on, on the same side, is the *New Century Building*, containing *Potter Hall* (Pl. 25, B 6; p. 256). Also to the right is *Chickering Hall* (Pl. 26, B 6; p. 256), with its arcaded front. This is adjoined by the handsome *Horticultural Hall* (Pl. 24, B 7; p. 256), at the corner of Massachusetts Ave. At the opposite corner is the imposing *Symphony Hall* (Pl. 23, B 7; p. 256), erected in 1900. At the corner of Gainsborough St., to the left, is the *New England Conservatory of Music* (Pl. 8, B 7; 2800 pupils), which includes *Jordan Hall* (p. 256), a fine concert-hall. Opposite is the *Children's Hospital*. For buildings in the extension of this street, see p. 268.

***Commonwealth Avenue** (Pl. A, B, 4-6), which runs parallel with Boylston St., is one of the finest residence-streets in America, with its rows of trees and handsome houses. It is 240 ft. wide and is adorned with statues of *Alex. Hamilton* (Pl. B, 4; 1757-1804; by Rimmer), *John Glover* (Pl. B, 5; 1732-97; by Milmore), *William Lloyd Garrison* (Pl. B, 5; 1805-79; by Warner), *Leif Ericson*, the leader of the Norsemen who are supposed to have landed at Point Allerton

(p. 274) in the 11th cent. (Pl. A, 6; by Miss Whitney), and *Patrick Collins* (Pl. A, 6; 1844-1905; by H. H. and A. R. Kitson).

***Beacon Street** (Pl. A-C, 3-6), beginning on Beacon Hill, skirting the N. side of the Common, and then running parallel with Commonwealth Ave., is the aristocratic street of Boston *par excellence*. Its back-windows command a fine view of the Charles River. No. 296 was the home of *Dr. Oliver Wendell Holmes* (1809-94).

A handsome embankment and driveway, with a subway below them (comp. p. 256), are to be constructed on the river-side of Beacon Street.

The **Back Bay** (Pl. A, B, 4-6), the fashionable W. end district traversed by the above-named streets, was at the beginning of the 19th century occupied by dreary mud-flats, salt-marshes, and water (comp. p. 258). The **Back Bay Fens** (Pl. A, 7) have been skilfully laid out by the late F. L. Olmsted on the site of the unsightly swamps which formerly lay here and form the first link in the splendid chain of parks and boulevards, of which Franklin Park is the chief ornament (comp. p. 269). The chief entrances to the Fens are marked by a *Gateway* (Westland Ave.) and a *Fountain* (Hemenway St.); and at the end of Boylston St. is a fine memorial of *John Boyle O'Reilly* (1844-90), by D. C. French. The quarter adjoining the Fens contains various important public and private buildings. Among these are the *Somerset Hotel* (p. 254), corner of Commonwealth Ave. and Charles Gate East; the *Massachusetts Historical Society* (Pl. A, 6; interesting relics and valuable library), corner of Boylston St. and the Fenway; the *Boston Medical Library* (Pl. A, 7), in the Fenway, adjoining the last. Considerably to the S. of this point, at the corner of Huntington and Rogers Aves., is the *Medical and Dental School of Tufts College* (Pl. I, D 6; p. 312). On the other side of Huntington Ave., at the corner of Opera Place, is the new **Opera House** (Pl. B, 7), erected from designs by *Wheelright & Haven*. Just beyond this is the **New Museum of Fine Arts** (Pl. I, C 6; comp. p. 265), a large granite edifice by *Guy Lowell* (1907-8), admirably adapted for its ends. Farther out, at the corner of Longwood Ave., are the extensive new buildings of the ***Harvard Medical School** (Pl. I; C, 6), erected in 1905-1907 from the designs of *Shepley, Rutan, and Coolidge*, at a cost of $5,000,000, and equipped in the most complete and up-to-date manner. — At the corner of the Fenway and Worthington St. is *Simmons Hall* (Pl. I; C, 6), a college for women. At the opposite corner of Worthington St. is —

Fenway Court (Pl. I; C, 6), the residence of *Mrs. John L. Gardner*, a building in a Venetian style, enclosing a courtyard and incorporating many original balconies, windows, and other details brought from Italy. It contains a choice *Collection of Art, which is open to the public from time to time (dates and tickets, price $1, obtained only at Herrick's, Copley Sq.). Catalogue 25 c.

Among the most notable works in the collection are the following: *Raphael*, *Portrait of Fedra Inghirami (copy in the Pitti Palace, Florence), *Pietà (small); *Botticelli*, Death of Lucretia, *Madonna aux Epis (the 'Chigi

Botticelli'); *Tintoretto*, Portrait of a lady (from the Chigi Gallery); *Titian*, *Rape of Europa, painted for Philip II. of Spain, afterwards in Lord Darnley's collection at Cobham Hall, and described by Rubens as 'the first picture in the world'; *Titian*, Anne of Austria and her mother; *Paolo Veronese*, *Coronation of Hebe (ceiling-painting); *Giorgione* (after *Bellini*), Head of Christ; *Andrea del Sarto* (?), Bandinelli, the sculptor; *Cellini*, Bronze bust of Bindo Altoviti (from the Palazzo Altoviti at Rome); *A. Mantegna* (?), *Madonna and Child, with saints; *Filippo Lippi*, Madonna and Child; *Fra Angelico*, Death and Assumption of the Virgin; *Masaccio*, Man's head; *Pollajuolo*, Portrait; *Fior. di Lorenzo*, Annunciation; *Pesellino*, Love and Death, Labour and Time (two panels); *Moroni*, Portrait; *Crivelli*, *St. George; *Paris Bordone*, Christ in the Temple; *Matteo Civitale*, Madonna and Child (terracotta group); *Rubens*, **Thomas Howard, Earl of Arundel; *Rembrandt*, *Portrait of himself at the age of 22, Storm on the Sea of Galilee, *Landscape, *Portraits of a husband and wife (1633); *Van Dyck*, So-called Duchess of Ossuna; *Albrecht Dürer*, Portrait; *Holbein*, *Sir William and Lady Butts; *Ant. Moro (Sir Anthony More)*, *Queen Mary I. of England; *Jan van der Meer*, Concert; *Terburg*, Music-lesson; *Schongauer*, Madonna (copy of the painting at Colmar); *Degas*, *Woman in black (1867). — The beautiful *Central Court also contains many interesting works of art.

***Franklin Park** (Pl. I; C, D, 8, 9), is 520 acres in extent and lies in W. Roxbury (reached by electric car). Its natural beauties were skilfully taken advantage of by the late Frederick Law Olmsted, and many of its drives and walks are very beautiful (park-carriages 25 c. each). The park includes a public golf-course, tennis grounds, a toboggan-chute (in winter), etc. Extensive view from the Overlook.

The Public Park System of Boston is almost unique. The *City Park System*, with a total area of 2400 acres, forms an almost unbroken line of parks and parkways from the Public Garden (p. 260) to City Point, in Boston Harbour (p. 274). The main units in this system (Franklin Park, etc.) are mentioned at various pages of the Handbook. The *Metropolitan System*, forming an outer line of parks, has an area of 11,000 acres, including two large wooded reservations (Blue Hills, p. 275, and Middlesex Fells, p. 275), three beaches (Revere Beach, p. 280, Nantasket Beach, p. 274, and Lynn Beach, p. 280), and the boating section of the Charles River (comp. p. 275). When completed this system will afford 50 M. of drives. Comp. the Map at p. 274.

The **North End** (Pl. B, C, 1, 2) of Boston, embracing the site of *Copp's Hill* (p. 257), now one of the poorer districts and occupied mainly by foreigners, contains some points of considerable historical interest. The **Copp's Hill Burial Ground** (Pl. C, 2; key kept by sexton; see notice on gate), dating from 1660, contains the graves of Increase, Cotton, and Samuel Mather (1639-1723, 1663-1728, 1706-85). Adjacent, in Salem St., is **Christ Church** (Pl. 6, C 2; adm., including view from tower, 25 c.), the oldest church now standing in the city (1723), on the steeple of which the signal-lanterns of Paul Revere are said to have been displayed on April 18th, 1775, to warn the country of the march of the British troops to Lexington and Concord (comp. p. 308). Between Copp's Hill Burial Ground and the river is the small *North End Park* (Pl. C, 1). *North Square* (Pl. C, 2) is the centre of what is known as 'Little Italy'. The *House of Paul Revere* (see above and p. 259) has recently been restored and contains some relics.

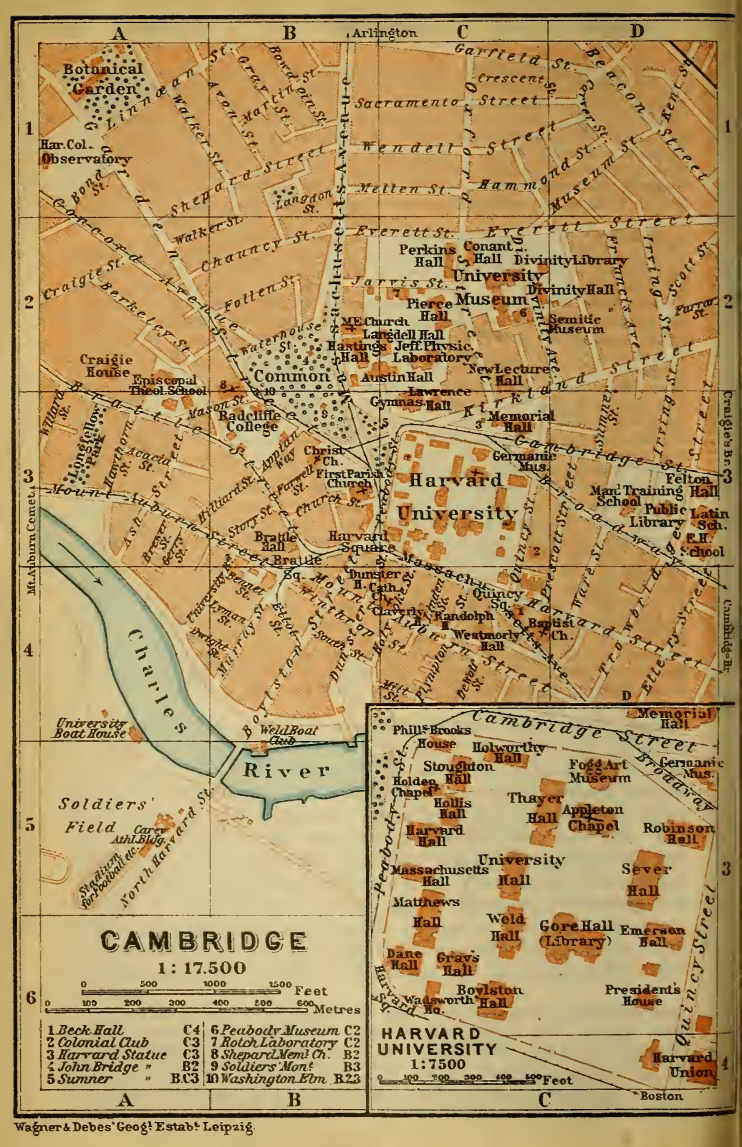
Boston has long been famous for its **Charitable Institutions.** The **Perkins Institution for the Blind* (Pl. I; G, 6), in South Boston (p. 257),

associated with the names of Laura Bridgman and Helen Keller, is one of the best-known of these and has a large library of raised-letter books (visitors admitted on Thurs. at 11 a.m.; 15 c.). Others are the *Massachusetts General Hospital* (Pl. B, 3); the *New England Women's Hospital* (Pl. I; C, 8) in Roxbury, entirely managed by women; the *Eye & Ear Infirmary* (Pl. B, 3); the *Old Ladies' Home* (Pl. B, 4); the *City Hospital* (Pl. D, 7); the *Children's Hospital* (p. 267); the *Carney Hospital* (Pl. I; G, 6), in South Boston; the *Kindergarten for the Blind*, in Jamaica Plain (p. 274); and the *Homeopathic Hospital* (Pl. 12; D, 7). The *Criminal* and *Reformatory Institutions* are mainly on the harbour-islands (p. 274) or in S. Boston.

Among other points of interest in Boston proper are the **Cathedral of the Holy Cross** (R. C.; Pl. D, 6), a large edifice in Washington St. (365 ft. long), in front of which is a *Statue of Columbus* (1892); the *Church of the Immaculate Conception* (Pl. 13; D, 7), Harrison Ave. (good music); the *Church of the Advent* (Pl. 1; B, 4), Brimmer St. (high-church Epis.; good music); the *Boys' English High & Latin School* (Pl. 4; C, 6), between Montgomery St. and Warren Ave. (the oldest school in the United States, dating from 1635); the *Girls' High & Latin School* (Pl. 10; C, 6), W. Newton St.; the *Armoury of the First Corps of Cadets* (Pl. C, 5); the *Tremont Building*, at the corner of Beacon and Tremont Sts. (view from upper stories); the *Youth's Companion Building* (Pl. 22; C, 5), at the corner of Columbus Ave. and Berkeley St.; the *Franklin Union* (Pl. C, 5), for industrial education (1908)); the *Pope Manufacturing Co.'s Building* (Pl. 17; C, 5), adjoining the last; the *Masonic Temple* (1898), at the corner of Tremont and Boylston Sts. (Pl. C, 4); the *Tremont Temple* (Pl. C, 3), with its curious façade and a large hall used as a free Baptist church and for other purposes; the *Charlesbank* (Pl. A, B, 2, 3), a small park, with open-air gymnasia and playgrounds; and the *Marine Park* (Pl. I; H, 6) at South Boston (band on Sun. evening in summer), with a statue of Adm. Farragut (by H. H. Kitson), public bath-houses, and two large piers, one of which leads to *Castle Island* (p. 274). A tablet on a building at the corner of Pearl St. and Atlantic Ave. (Pl. D, 3) marks the site of *Griffin's Wharf*, the scene of the Boston tea-party (p. 263). The statues not yet mentioned include those of *Samuel Adams* (p. 259), by Miss Whitney, in Adams Sq. (Pl. C, 3); *Gov. Winthrop* (p. 258), at the corner of Berkeley and Marlborough Sts. (Pl. B, 5), by Greenough; and small figures of *Columbus* and *Aristides* in Louisburg Sq. (Pl. B, 4). It may be added that *A. Bronson Alcott* and *Louisa M. Alcott* died at No. 10 Louisburg Sq. (1888), that *Jenny Lind* was married at No. 20 (1852), and that *W. D. Howells* lived at No. 4.

Cambridge (no good hotels; *Washington Court Café*, Brattle St., not far from Harvard Sq., L. 50 c., D. 75 c.), an academic city with (1905) 97,434 inhab., lies on the N. bank of the *Charles River*, opposite Boston, with which it is connected by several bridges traversed by electric tramways. It was founded as the fortified 'Newe Towne' in 1630-31, and received its present name in 1638. The road between Watertown and Charlestown is older than the town and was probably laid out over an Indian trail. The interest of Cambridge centres in the fact that it is the seat of ***Harvard University**, the oldest and most famous of American seats of learning. HARVARD SQUARE (Pl. B, C, 3), adjoining the University Yard, is the chief intersection-point of the tramway-lines and the focus of the city's activity.

Harvard College was founded by the Commonwealth of Massachusetts in 1636, and received in 1638 a legacy of about 800*l.* from the *Rev. John Harvard*, a graduate of Emmanuel College, Cambridge. Its growth through public fostering and private endowment has been continuous; and it is now attended by about 6000 students, taught by 550 professors and instructors. The faculty of Arts and Sciences includes Harvard College proper, or the academic department (2700 students), the Lawrence Scientific



Wagner & Debes' Geogl. Estabt. Leipzig.

School (science, mining, engineering), and the Graduate School. The Professional Schools embrace divinity, law, medicine, dentistry, veterinary medicine, and agriculture. The list of distinguished alumni includes the names of John Adams (class of 1755), John Quincy Adams (1787), W. E. Channing (1798), Edward Everett (1811), W. H. Prescott (1814), George Bancroft (1817), R. W. Emerson (1821), O. W. Holmes (a native of Cambridge; 1829), Sumner (1830), Motley (1831), Lowell (a native of Cambridge; 1838), E. E. Hale (1839), and Thoreau (1837). Among its presidents and professors have been Josiah Quincy, Edward Everett, Jared Sparks, Joseph Story, Asa Gray, Jeffries Wyman, Benj. Peirce, Agassiz, Longfellow, Holmes, Charles Norton, and Lowell.

The main buildings of the University (comp. inset-plan) are grouped near the centre of old Cambridge, about $3^1/_2$ M. from Boston, and enclose two spacious quadrangles, shaded by fine elms. The so-called 'Yard' has two main entrances, with gates erected in 1890 (W. end) and 1891. Among the buildings are *University Hall* (1815; by Bulfinch, p. 260), with the college-offices; *Massachusetts Hall* (1720), the oldest college building now standing; *Harvard Hall* (1766); *Gore Hall* (1841), with the *University Library* (650,000 vols.; numerous interesting relics and autographs); the *Boylston Chemical Laboratory;* **Sever Hall* (1880; by H. H. Richardson); *Robinson Hall*, the architectural school; *Emerson Hall*, for the philosophical department; *Appleton Chapel;* the tiny and outgrown *Holden Chapel* (1744); the *Phillips Brooks Memorial House* (1898); and several dormitory buildings (*Hollis, Stoughton, Holworthy, Thayer, Weld, Gray's, Matthews*, etc.). *Wadsworth House*, the unpretending wooden building in the S.W. corner of the Yard, was long the residence of the Presidents of the University. — On the N. side of the Yard, facing Cambridge St., is the **Fogg Art Museum,** open daily, 9-5, on Sun. 1-5, which includes admirable synoptical working collections of engravings, casts, photographs, and drawings (several by Turner); a small but choice collection of bronzes, vases, and coins (small room on groundfloor); a few excellent early-Italian paintings (upstairs), including examples of Benvenuto da Siena, Pinturicchio, and Giov. Bellini (?); and a few antiques, among which are a fine *Torso of Meleager (early 4th cent. B. C.) and a headless torso of Aphrodite (Greek, groundfloor, near the staircase). — In the small triangle at the junction of Broadway and Cambridge St. stands the **Germanic Museum** (Pl. C, 3; Mon., Frid., & Sat. 9-3.30, Sun. 1-5), containing casts of typical German sculptural monuments, largely the gift of the German Emperor, and reproductions of representative German gold and silver plate, given by leading German citizens. See 'Handbook of the Museum' by the curator, Prof. Kuno Francke. — On the other side of Cambridge St. is **Memorial Hall** (Pl. C, 3), by Ware and Van Brunt, erected in memory of the members of the University who fell in the Civil War. It includes a *Vestibule*, with tablets of marble bearing the names of the fallen; the *Sanders Theatre*, in which the graduation ceremonies are held, with a statue of *President Josiah Quincy* (1772-1864), by W. W. Story; and a large *Hall*, containing numerous interesting portraits and stained-

glass windows, and used daily as a dining-hall by 1000 students (other accommodation for students in the *Randall Dining Hall*, Divinity Ave.). To the W. of the building is a modern ideal *Statue of John Harvard* (1607-38), by D. C. French. — In Kirkland St., immediately to the N. of Memorial Hall, stands the *New Lecture Hall* (Pl. C, 2). — We now follow Kirkland St. to the E. and then Divinity Ave. to the left. In the latter, to the left, is the main building of the **University Museum** (Pl. C, 2; open daily, 9-5; Director, Prof. Alex. Agassiz), containing valuable collections of comparative zoology (including a stuffed okapi), botany, mineralogy, and geology. The *Glass Flowers* in the Botanical Section (W. wing, 2nd floor), made by the Blaschkas of Hosterwitz (near Dresden), are so perfect as to stand the test of a microscope. The Anthropological Section occupies an adjoining but separate building known as the *Peabody Museum* (Pl. 6; C, 2). On the other side of Divinity Ave. is the *Semitic Museum* (Pl. D, 2), with Assyrian, Babylonian, Egyptian, Palestinian, Syrian, Persian, and Phœnician collections. Opposite the Museums are the *Divinity Hall* and the *Divinity Library* (Pl. C, 2). The *Lawrence Scientific School* (Pl. C, 2, 3; p. 270), the *Hemenway Gymnasium* (Pl. C, 2, 3), the *Jefferson Physical Laboratory* (Pl. C, 2), the *Rotch Laboratory* (Pl. 7; C, 2), *Hastings Hall* (Pl. B, 2; a dormitory), **Austin Hall* (Pl. B, C, 2; by H. H. Richardson), and *Langdell Hall* (Pl. B, C, 2; 1907; these two belonging to the Law School), all lie to the W. of Memorial Hall.

The *Botanic Garden* (Pl. A, 1) and the admirable *Observatory* (Pl. A, 1) are ¾ M. to the N.W. *Pierce Hall*, *Perkins Hall*, and *Conant Hall* (Pl. C, 2), three dormitories, stand to the N. and W. of the Museums. — At the corner of Massachusetts Ave. and Quincy St. stands the building of the *Harvard Union* (comp. inset), a club for graduates and undergraduates, the gift of Mr. H. L. Higginson, containing a fine portrait of the donor and a less successful one of President Eliot, both by Sargent. To the S. of this point are *Claverly*, *Randolph*, and *Westmorly Halls* (Pl. C, 4), three luxurious dormitories. — The chief *Athletic Ground* of Harvard is the *Soldiers' Field* (Pl. A, 5), on the S. bank of the Charles, with the *Carey Athletic Building*, the *Locker Building*, and the **Stadium**, built of concrete, accommodating 27,000 spectators, and equalling the Roman Colosseum in circumference. The *University Boat House* (Pl. A, 4) lies on the S. bank of the Charles, and the *Weld Boat Club* (Pl. B, 4, 5), on the opposite bank, is also used by the students. — The buildings of the *Medical*, *Dental*, and *Veterinary Schools* are in Boston (comp. p. 268), and the *School of Agriculture & Horticulture*, known as the *Bussey Institution* (Pl. I; B, 9), with an arboretum and laboratories, is at Jamaica Plain (p. 274).

The **Common** (Pl. B, 2, 3), to the W. of the University buildings, contains a *Soldiers' Monument* (Pl. 9) and statues of *John Bridge* (Pl. 4; 1578-1665), the Puritan, and *Charles Sumner* (Pl. 5; 1811-74). Near its N.W. angle is the venerable *Washington Elm* (Pl. 10), under which Washington assumed command of the American army on July 3rd, 1775. To the S. of the Elm is *Radcliffe College* (Pl. B, 3), for women, named in honour of the Englishwoman Anne Radcliffe (Lady Moulson), the first woman to give a scholarship to Harvard (1640). Here about 470 young women receive instruction from

Harvard professors and are granted the degrees of A. B. and A. M., countersigned by the President of Harvard University. Adjacent is the *Shepard Memorial Church* (Pl. 8). To the W. of this is the *Episcopal Theological School* (Pl. A, 2, 3), with *St. John's Memorial Chapel.* — Opposite the S. end of the Common stand the *First Parish Church* (Pl. B, 3), with a Gothic steeple, and *Christ Church*, built of materials brought from England and containing a fine set of chimes. Between them is the burying-ground of the old town.

'Like Sentinel and Nun, they keep
'Their vigil on the green;
'One seems to guard, and one to weep
'The dead that lie between'. *(O. W. Holmes.)*

A little to the W. of the Epis. Theological School, in Brattle St., facing towards the Charles River, is ***Craigie House** (Pl. A, 2), built in 1759 by Col. Vassall and occupied by Washington in 1775-76, but winning its chief interest from the fact that it was the home of *Henry W. Longfellow* from 1837 till his death in 1882 (open to visitors on Sat., 2-4 p.m.). It contains many interesting relics of the poet. In Elmwood Ave., which leads to the left from Brattle St. farther on, is *Elmwood*, the home of *James Russell Lowell* (1819-91), adjoined by a small public park.

Following Brattle St. or Mt. Auburn St. for about 1 M. (electric car on the latter), we reach ***Mt. Auburn Cemetery**, which is beautifully laid out and contains the graves of Longfellow, Lowell, Sumner, Everett, Josiah Quincy, Rufus Choate, Channing, Motley, Agassiz, Prescott, Phillips Brooks, Oliver Wendell Holmes, and many other distinguished men. *View of Boston from the tower on the highest point. The *Chapel* contains some interesting statues.

Among the other important buildings of Cambridge are the *City Hall* (Pl. I; B, 3), Massachusetts Ave., designed by A. W. Longfellow; the *Public Library* (Pl. D, 3), at the corner of Broadway and Irving St.; and the *Manual Training School*, opposite the last — all three presented to the city by *Mr. F. H. Rindge*, a native of Cambridge. The *Epworth Methodist Church* (Pl. B, 2), to the N. of Austin Hall, the *Riverside Press*, and the *University Press* may also be noted. At *Cambridgeport* are the famous telescope-makers, *Alvan Clark & Co.* The total value of the industrial products of Cambridge in 1905 was $ 42,407,064. — The *Charles River Speedway*, on the S. bank of the Charles River, near the Soldiers' Field (p. 272), is much frequented for driving and sleighing. — At No. 21 Sacramento St. (Pl. C, 1) is the finest *Wistaria* in the country. — *Arthur Hugh Clough* (1819-61) lived for some time in Appian Way (Pl. B, 3), at the house now numbered fifteen.

Charlestown (Pl. A, B, 1), on the left bank of the Charles River, settled in 1629 and containing ca. 40,000 inhab., is now incorporated with Boston, with which it is connected by railway and other bridges. The most prominent feature of Charlestown is the **Bunker Hill Monument** (Pl. A, 1), a granite obelisk 221 ft. high (294 steps), erected in 1825-42 to commemorate the battle of *Bunker* or (more properly) *Breed's Hill* (June 17th, 1775). The *View from the top (adm. 20 c.) includes Boston, Boston Harbour, the Charles and Mystic Rivers Cambridge, the Blue Hills, etc. Adjacent is a bronze

statue of *Col. Prescott*, by Story, and in the building at the base of the monument is one of *Gen. Warren* (killed in the battle).

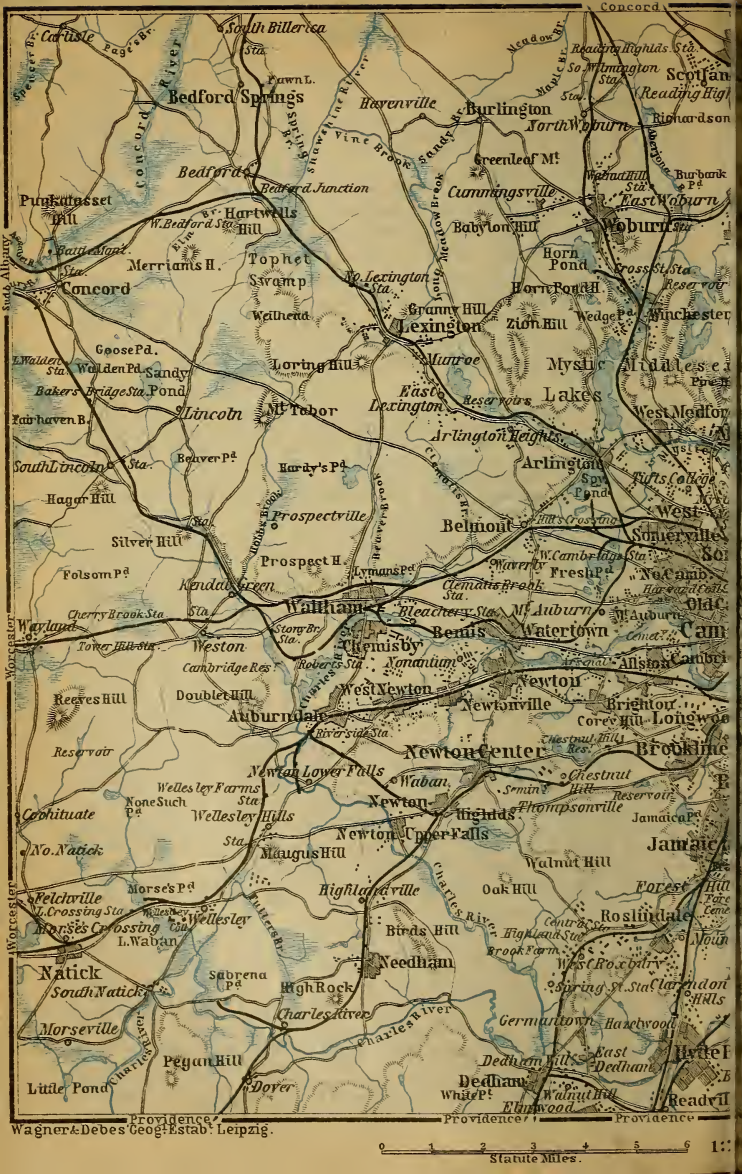
The British troops under Lord Howe were checked on their first two assaults on the hill occupied by the American troops, but on the third attempt they drove the Americans from their entrenchments and took possession of the hill. Washington then advanced on Boston and after a siege of nine months compelled the British to evacuate the city (comp. p. 258).

Charlestown also contains a *Navy Yard* (Pl. B, 1; 87 acres; open 9-4), a *Soldiers' Monument*, a *Monument to John Harvard* (p. 270; in the old burial-ground), and the *First Parish Congregational Church*, of which he was pastor. A house in Main St., near Thompson Sq. (p. 255; Pl. II, A 1), is marked as the birthplace of *Samuel Morse* (1791-1872; comp. pp. lxxxii, 78, 236), inventor of the electric telegraph. — In the White Star Line dock lies the old frigate 'Constitution', the victor in the famous fight with the British 'Guerrière' (Aug. 19th, 1812).

The attractive **Environs of Boston** afford opportunity for many pleasant excursions (numerous historical points now marked by tablets). The *Harbour, dotted with numerous islands, is about 15 M. long from N. to S. and 8 M. wide from E. to W. and has a minimum depth of 23 ft. at low water. The Main Ship Channel, or entrance to the harbour, is between *Point Allerton* on the S. and the *Brewsters*, with *Boston Light*, on the N. Steamers ply regularly from *Rowe's*, *Forster's*, and *India Wharves* (Pl. D, 2) to the favourite resorts. Among these are Hull (*The Pemberton*, $ 4; *Nautilus Inn*, from $ 2½; *Kenberma Inn*), with the headquarters of the *Hull Yacht Club*; *Hingham* (see p. 275); and Nantasket Beach (*Rockland Ho.*, $ 4; *Atlantic House*, $ 3-4½; *Pacific*, $ 3), a fine strip of beach, 5 M. in length, which offers a scene of great animation on Sundays and holidays. *Paragon Park* is full of Coney Island amusements. A narrow-gauge electric railway runs from Hull along Nantasket Beach to *Nantasket Junction* (p. 276). Among the chief islands in the harbour are *Castle Island* (p. 270), with the old Fort Independence; *Governor's Island*, with Fort Winthrop; *Deer Island*, with the House of Industry; *Long Island*, with the City Poorhouses; and *George's Island*, with the strong Fort Warren. The lights and beacons include *Deer Island Light*, *Long Island Light*, *Nix's Mate*, *Bug Light*, and *Boston Light*, at the entrance to the Harbour.

Steamers also ply regularly in summer to *Nahant* (p. 280; 25 c.), while excursion-trips are made to the *North Shore* (p. 282), *Provincetown* (p. 279), *Plymouth* (p. 276), and other points in *Massachusetts Bay*.

The most beautiful of the suburban neighbours of Boston is *Brookline (Pl. I; A, B, 5-7), which lies to the S.W. of the city and contains many handsome residences embowered in trees. It is connected with Boston by railway and electric tramway. The charming grounds of *Holm Lea*, the home of Prof. C. S. Sargent, the well-known arboriculturist, are open to the public for two advertised days in June (fine show of azaleas and rhododendrons). — In *Chestnut Hill*, to the W. of Brookline, is the home of Mrs. Mary Baker Eddy. The drive round the large *Chestnut Hill Reservoir* is a favourite one from Boston. — To the S. of Brookline lies Jamaica Plain (Pl. I; A, B, 8, 9), with *Jamaica Park*, *Jamaica Pond* (on the W. bank, the home of the late Francis Parkman, the historian), and the *Arnold Arboretum*, one of the finest institutions of the kind in the world (fine hemlock wood at its S. end; view from the central hill). *Mrs. Quincy A. Shaw*, Perkins St., Jamaica Plain, possesses the richest and choicest *Collection in existence of works by *J. F. Millet*, *Rousseau*, *Troyon*, *Corot*, *Daubigny*, and other masters of the Barbison school (adm. on personal introduction only). Among other works of art in the same collection are paintings by *Rembrandt* (two heads), *Potter*, *Frans Hals*, *Francia*, *Tintoretto*, and *Mainardi*; a *Madonna by *Luca della Robbia*; and a marble relief and a *Bust of Lorenzo de' Medici, by *Verrocchio*. — A little farther to the S. is the pretty


Concord
Carlisle
Bagley Br.
South Billerica
Sta.
Spencer Br.
Concord River
Fawn L.
Bedford Springs
Haverville
Burlington
North Woburn
Reading Highlds. Sta.
So. Wilmington Sta.
Scotland
Reading Highlds
Richardson
Meadow
Maple
Shawsheen River
Vine Brook
Sandy
Meadow Brook
Greenleaf Mt.
Bedford
Bedford Junction
Cummingsville
Walnut Hill Sta.
Burbank Pd.
East Woburn
Pinkatasset Hill
W. Bedford Sta.
Hartwells Hill
Babyon Hill
Woburn
Elm Br.
Butts Mans.
Sudbury Aqueduct
Merriams H.
Tophet Swamp
Mt. Lexington
Horn Pond
Horn Pond H.
Gross St. Sta.
Reservoir
Concord
Sta.
Wellhead
Granny Hill
Lexington
Zion Hill
Wedge Pd.
Winchester
Goose Pd.
L. Walden Sta.
Walden Pd.
Sandy Pond
Baker's Bridge Sta.
Loring Hills
Monroe
Mystic
Middlesex
Fells
Lincoln
Mt. Tabor
East Lexington
Reservoirs
Lakes
West Medford
Fairhaven B.
Arlington Heights
South Lincoln Sta.
Beaver Pd.
Hardy's Pd.
Arlington
Tufts College
Hagar Hill
Prospectville
Belmont
Somerville
Silver Hill
Hills Crossing
Prospect H.
Lymans Pd.
W. Cambridge Sta.
Fresh Pd.
No. Cambridge
Folsom Pd.
Kendall Green
Clematis Brook
Sta.
Cherry Brook Sta.
Waltham
Bleachery Sta.
Mt. Auburn
Mt. Auburn
Old C.
Wayland
Stony Br.
Sta.
Bemis
Watertown
Cam
Tower Hill Sta.
Weston
Chemisby
Comet
Allston
Cambri
Cambridge Res.
Roberts Sta.
Nonantum
Arsenal
Charles River
Reeves Hill
Double Hill
West Newton
Newton
Worcester
Auburndale
Newtonville
Brighton
Coreys Hill
Longwo
Riverside Sta.
Chestnut Hills Res.
Reservoir
Newton Center
Brookline
Newton Lower Falls
Waban
Smiths
Chestnut Hill Reservoir
Wellesley Farms Sta.
None Such Pd.
Wellesley Hills
Newton Highlds.
Thompsonville
Jamaica Pd.
Cochituate
Newton Upper Falls
Jamaica
No. Natick
Sta.
Maugus Hill
Walnut Hill
Forest Hill
Morses Pd.
Highlandville
Oak Hill
Fellsville
L. Crossing Sta.
Wellesley
Roslindale
Morses Crossing
L. Waban
Birds Hill
Brook Farm
West Roxbury
Natick
Sabrena Pd.
Needham
Spring St. Sta.
Clarendon Hills
South Natick
High Rock
Charles River
Germantown
Hazelwood
Morseville
Pegan Hill
Dedham Mills
East Dedham
Little Pond
Dover
Dedham
White Pd.
Walnut Hill
Readvil
Elmwood
Providence
Providence
Providence
Wagner & Debes Geogr. Estab. Leipzig.
0 1 2 3 4 5 6
Statute Miles.

Portland
Portland
Portland
Pillings Pd.
Suntang L.
Peabody
No. Salem
Salem Neck
Ft Pickering Light
Lowell St. Sta.
Lynnfield
Cedar Pd
Salem
Eagle Id
So. Peabody
Salem Harbour
Coddon Hill
Lowells Id
Montrose
So. Lynnfield
Needhams Corner
So. Salem
Marblehead
Wakefield
Nashua
Wakefield Junct.
North Saugus
Mt Spickett
Spring Pd
Marblehead Neck
Saugus River
Walden Pd
Wyoma L.
Wyoma
Devereux Sta.
Clifton Sta.
Greenwood
Lynn Woods
Beach Bluff Sta.
Wenuchus L.
Phillip's Beach Sta.
Tinker's Id
Birch Pd
Pranker's Pd
Breed's Pd
East Lynn
Phillip's Beach
Ram Id
Saugus
Lynn
Swampscott
Crystal L.
Phillips Pt
West Lynn
Nahant Bay
Melrose
East Saugus
Lynn Harbor
Lynn Beach
Fells Sta
Franklin Pk
Cliftondale
Saugus Riv.
Point of Pines
Little Nahant
Maplewood
Pines
Linden
Egg Rock Light
Malden
Revere Beach
Nahant
East Point
Revere Beach Sta.
Bass Pt
Shag Rocks
Mt Washington
Everett
Revere
Crescent Beach Sta.
MASSACHUSETTS
Chelsea
Belle Inlet
Beachmont
Breed's Id
Grover's Cliff
Mystic River
Charlestown
East Boston
Winthrop
Winthrop Beach Sta.
Maverick Id
Winthrop Head
The Graves
Snake Id
Apple I.
Point Shirley
BAY
Boston
Ft Winthrop
Governor's Id
Deer Island
Green Id
Harbor
Great Calf Id
Outer Brewster
So. Boston
Ft Independence
President Roads
Middle Brewster
City Point
Castle Id
Long Island Light
Lovell's Id
Great Brewster
Little Brewster
Washington Ville
Gallums
Boston Light
Old Harbor
Spectacle Id
Long Island
Ft Warren
Thompson's Id
George's Id
Nantasket Roads
Dorchester B
Commercial Pt
Moon Id
Rainsford Id
Windmill Pt
Pt Allerton
Harding Ledge
Hog Id
Peddock's Id
Hull
Nantasket Beach
Squantum
Strawberry Hill
Neponset
Quincy Bay
Prince's Hd
Sagamore Head
Bumkin Id
Atlantic Sta
Lower Mills
No. Quincy
Nut Id
Sheep Id
Half Moon Id
Hough's Neck
Grape Id
Little Black Rock
Black Rock
Wollaston Heights
World's End
Downer Land
Nantasket
E. Milton
Jerusal. Road
Jerusalem
Quincy Center
Town Riv.
Germantown
Weymouth Back Riv.
Hingham Harb.
Nantasket Junct.
W. Quincy
Quincy Pt
Hingham
So. Quincy
No. Weymouth
W. Hingham
No. Conasset Sta.
South Shore, Plymouth
Whitman, Plymouth
Martha's Vineyard & Nantucket
0 1 2 3 4 5 6 7 8 9 10
Kilometres.

Forest Hills Cemetery (Pl. I; B, C, 9), with a fine monument to the sculptor Martin Milmore, by D. C. French (relief of Death staying the sculptor's hand). The cemetery abuts on *Franklin Park* (see p. 269). All these places may be easily combined in one afternoon's drive and are accessible by electric car. — The *Martin Luther Orphan Home*, in the district of *West Roxbury*, occupies the **Brook Farm**, where a small group of cultivated people, led by George Ripley, made their famous attempt to found a socialistic community (1841-47). Hawthorne, Margaret Fuller, and Channing were among those connected with this experiment. The home and church of *Theodore Parker* (1810-60) were in W. Roxbury, and there is a bronze statue of him in Centre St. — *Chelsea* (Pl. I; G, H, 1), to the N. of E. Boston, on the *Mystic River*, contains a Soldiers' Monument, a Soldiers' Home, a Marine Hospital, a Naval Hospital, and well-known Art-Tile Works. Half of it was burned down in 1908. — Those who are fond of rowing and canoeing should go by the Boston & Albany R. R. or by electric car to (11 M.) *Riverside* (boat-houses, etc.), situated on a lovely reach of the *Charles River*. On the edge of the river is *Norumbega Park*, a pleasure-resort with a restaurant, theatre, concerts, electrical fountain, boat-house, menagerie, and other attractions (adm. 10 c.; return-ticket by Commonwealth Ave. Street Railway, from Newton Boulevard, incl. adm., 15 c.). On the river-bank, about 1 M. below, is a tower erected by Prof. Horsford on what he believed to be the site of the ancient *Norumbega*.

Other favourite resorts within easy reach of Boston are *Newton* (p. 241); the *Blue* or *Milton Hills* (views), 8 M. to the S. (comp. p. 245); *Revere Beach* (p. 280); *Arlington Heights* (360 ft.; view; Robbins Springs Hotel), reached by train from Boston or by electric car viâ Cambridge; *Waverley* (reached by electric car or railway), about 3 M. to the W. of Cambridge, with the picturesque Beaver Brook and Waverley Oaks Reservation (fine trees); and the *Middlesex Fells* (p. 285). Longer excursions may be made to *Concord* (p. 306) and *Lexington* (p. 308), *Providence* (p. 243), *Newport* (p. 248), etc.

From Boston to *New York*, see R. 30; to *Portland*, see R. 35; to the *White Mts.*, see p. 320; to *Martha's Vineyard and Nantucket*, see R. 33; to *Plymouth*, see R. 32; to *Cape Cod*, see R. 34; to *Campobello and Grand Manan*, see R. 40; to *Albany*, see R. 44; to *Canada*, see R. 42.

32. From Boston to Plymouth.

Comp. Map, p. 232.

a. Viâ Whitman.

37 M. Old Colony System of N. Y. N. H. & H. R. R. *(South Union Station)* in 1-1½ hr. (fare 75 c.; return-ticket, good by either route, $ 1½).

From Boston to (11 M.) *South Braintree*, see p. 253. 15 M. *South Weymouth*; 19 M. *Abington*. From (21 M.) *Whitman* a branch-line runs to (7 M.) *Bridgewater* (p. 278). 30 M. *Plympton*, at the S. end of *Silver Lake*; 33 M. *Kingston*. The monument at Duxbury (p. 276) is now seen to the left, as the train skirts *Plymouth Bay*. 37 M. *Plymouth*, see p. 276.

b. Viâ South Shore.

46 M. Old Colony System of N. Y. N. H. & H. R. R. *(South Union Station)* in 1¾-2 hrs. (fares as above).

From Boston to (10 M.) *Braintree*, see p. 253. Our train turns to the left (E.). 12 M. *Weymouth*. — 17 M. *Hingham* (Cushing Ho., $ 3), a quaint village on Boston Harbour, settled in 1635, with the oldest occupied church in New England (1681). In the graveyard

(*View) is the grave of *J. A. Andrew* (d. 1867), the famous 'War Governor' of Massachusetts, marked by a statue. — From (18 M.) *Nantasket Junction* a branch-line runs to *Nantasket Beach* and *Hull* (see p. 274). — 22 M. *Cohasset* (Black Rock Ho., on the Jerusalem Road, from $ 3), a delightful shore-resort, with numerous fine villas lining the *Jerusalem Road*. About 4 M. offshore is the *Minot's Ledge Lighthouse* (often visited from Cohasset Harbor). — 27 M. *Scituate* (The Cliff), an old fishing village, frequented for sea-bathing, was the birthplace of Samuel Woodworth (1785-1842), author of 'The Old Oaken Bucket'. — 34 M. *Marshfield* (Brant Rock Ho., $ 2-3) was the home of *Daniel Webster*, where he died in 1852. — 38 M. *Duxbury* (Duxbury Inn, $ 2; Myles Standish Ho., at S. Duxbury, frequented by automobilists, $ 3-5) was the home of *John Alden* and *Miles Standish*, and a monument 110 ft. high, surmounted by a statue, has been erected near the site of the latter's house. — 42 M. *Kingston*, and thence to (46 M.) *Plymouth*, see p. 275.

Plymouth (*Samoset Ho.*, $ 2½-4; *Plymouth Rock Ho.*, plain, $ 2; *Hotel Pilgrim*, $ 3-4, 3 M. to the S.E., reached by electric car), an industrial village and summer-resort with (1905) 11,119 inhab., lies on the sheltered bay of the same name, opening off the W. side of the larger *Cape Cod Bay* (p. 279). It is of abiding interest as the landing-place of the Pilgrim Fathers (Dec. 21st, 1620) and the site of the first settlement in New England.

On leaving the railway-station we proceed to the W. to *Court St.*, which we follow to the left. At the corner of Chilton St., to the left, is *Pilgrim Hall (open daily; 25 c.), containing numerous interesting relics of the Pilgrims, paintings of their embarkation and landing, old portraits, etc. — Farther on, to the right, at the corner of Russell St., is the *Court House*. North St., to the left, leads to the so-called Plymouth Rock, a granite boulder enclosed by a railing and covered with a canopy. This, however, is only a fragment (broken off in 1774) of the flat rock where the Pilgrims landed, which lies nearer the sea and is now covered by a wharf. *Cole's Hill*, opposite the rock, was the burial-place of the early settlers (1620-21), and some human bones found here are now preserved in a chamber in the canopy over the enclosed fragment.

We now follow *Water Street* to *Leyden Street*, which we ascend to the right, passing (left) the site of the first house. On reaching *Town Square* we ascend by the path to the right to the ancient *Burial Hill, with the graves of many of the early settlers, including Gov. Bradford (comp. p. 261).

A fortified church was erected here in 1622. The *View embraces Plymouth Bay, with the Gurnet Lighthouse; Duxbury, with its monument (see above); Cape Cod; the Pilgrim Monument (see below); the Manomet Hills (to the S.), etc. — To the S. is *Watson's Hill*, where the Pilgrims made a treaty with Massasoit in 1621.

We may now descend on the N.W. side of Burial Hill and follow *Allerton Street* to the N. to (¼ hr.) the National Monument

TO THE PILGRIMS (1888), consisting of a granite pedestal 45 ft. high, surmounted by a figure of Faith, 36 ft. high, and surrounded by seated figures, 20 ft. high, representing Law, Morality, Freedom, and Education. It is about 1/4 M. from the railway-station, which we regain by following Cushman St. to the E.

The 'Environs' of Plymouth contain hundreds of small lakes and ponds, of which *Billington Sea* is the largest. Large quantities of the trailing arbutus or mayflower (*Epigaea repens*) are found here in spring. Near Billington Sea is the pretty *Morton Park*. — *Manomet Bluffs* (Ardmore Inn, $ 2 3/4), to the S.E. of Plymouth, are frequented in summer.

33. From Boston to Martha's Vineyard and Nantucket.

Comp. Map, p. 232.

OLD COLONY SYSTEM OF N. Y. N. H. & H. R. R. to (72 M.) *Wood's Hole* in 2 1/4-3 hrs.; STEAMER thence to *Cottage City* in 3/4 hr. (through-fare $ 1.95, return-fare $ 3), to *Nantucket* in 3-3 1/2 hrs. (through-fare $ 2.75, return-fare $ 4). — An alternative route (same fares) is by train to (1 1/2-1 3/4 hr.) *New Bedford* (p. 279) and thence by steamer (2 and 4 1/2-5 hrs.).

From Boston to (55 M.) *Buzzard's Bay*, see R. 34. — The train here diverges to the right from the line to Provincetown and runs to the S. along the shore of *Buzzard's Bay*. 57 M. *Monument Beach;* 59 M. *Pocasset;* 68 M. *Falmouth*, for *Falmouth Heights* (Cleveland, $ 4-5; Vineyard Sound Ho., $ 3), *Quisset* (2 1/2 M.; Quisset Harbor Ho., $ 3), and (3 1/2 M.) *Menauhant* (Menauhant Hotel, $ 3).

72 M. **Wood's Hole** (*The Breakwater*, $ 3 1/2; *Dexter Ho.*, $ 2 1/2; *Avery*, $ 2) is a small maritime village with a Marine Biological Laboratory and a station of the U. S. Fish Commission, which attract many naturalists and students in the summer months. It is reached from New York viâ Fall River. **Miss Fay's Rose Garden ('New Forest')*, 3 acres in extent, is open to the public in the blossoming season (last two weeks in June, and first week in July) and brings hundreds of visitors. Steamers ply hence at frequent intervals to (7 M.) *Cottage City*, on *Martha's Vineyard*.

Martha's Vineyard is an island off the S. coast of Massachusetts, 23 M. long and 10 M. across at its widest part. Its inhabitants (4551 in 1905) were formerly occupied in the whale-fisheries, but now owe most of their prosperity to the summer-visitors. The chief resort of the island is **Cottage City** or *Oak Bluffs* (*Sea View*, $ 2 1/2-4; *Naumkeag*, *Pawnee*, *Wesley*, $ 2 1/2-3 1/2; *Island Ho.*, *Frasier*, $ 2-3), pleasantly situated on the N.E. side of the island and said to contain 1200 'cottages'. At the large *Camp Meeting Grounds* 20,000 Methodists assemble every August. An electric railway runs to the S. to (5 M.) *Edgartown* (Harbor View Ho., $ 3 1/2; coach to this point; good road) and (8 M.) *Katama* (Mattakeset Lodge); and there are also summer-settlements at *Vineyard Haven* (Rudder Grange, from $ 2 1/2; Mansion Ho., $ 2), with a fine harbour, and *West Chop* (The Cedars, $ 3; West Chop Inn, $ 2-2 1/2). **Gay Head*, the W. extremity of the island, commands a fine view; the cliffs, recalling

Alum Bay in the Isle of Wight, are 200 ft. high (lighthouse). Part of this end of the island is reserved for the remnant of the Indian inhabitants.

Steamers ply daily from Cottage City to *Nantucket* (see below) and *New Bedford* (p. 279) and weekly to *Portland* (p. 287) and *New York* (p. 10).

The sandy, treeless island of **Nantucket**, with (1905) 2930 inhab., lies 12-15 M. to the E. of Martha's Vineyard, but the steamboat course from Cottage City to the quaint town of **Nantucket** (*Sea Cliff Inn*, $ 3-4; *Ocean Ho.*, *Holiday Inn*, *Veranda Ho.*, $ 2½-3½; *Point Breeze*, $ 2-3), on the N. side of the island, is about 26 M. Nantucket, like Martha's Vineyard, was once a great whaling-place, but now depends mainly on fishing, farming, and summer-visitors. The *Athenaeum* contains a collection of curios from all parts of the globe. In 1908 an *Observatory* was opened here in memory of Maria Mitchell (1818-89), the astronomer, a native of Nantucket. A narrow-gauge railway runs to (10 M.) **Siasconset** (pron. 'Sconset'; *Ocean View Ho.*, $ 3; *Beach Ho.*, $ 2-3), at the E. end of the island (round trip 80 c.). The Wireless Telegraph Station here receives the earliest news of steamers from Europe and passes it on to the mainland (comp. p. 2). Just outside Siasconset is a cranberry bog 500 acres in extent (comp. p. 279). *Sankaty Head* (90 ft.), 1 M. to the N. of Siasconset, bears a lighthouse (fine ocean-view). At **Surfside** (*Surf Side Ho.*, $ 4), 3 M. to the S. of Nantucket, a splendid surf rolls in after a storm.

Both Martha's Vineyard and Nantucket were settled in the 17th cent. and possess buildings and relics of considerable historical interest. Nantucket, in particular, is very quaint and picturesque.

34. From Boston to Provincetown.

Cape Cod.

Comp. Map, p. 232.

120 M. Old Colony System of N. Y. N. H. & H. R. R. *(South Union Station)* in 4¼ hrs. (fare $ 2.40). — *Steamers* also ply daily to Provincetown in summer from *Battery Wharf* (50 M., in 4 hrs.; return-fare $ 1).

From Boston to (11 M.) *South Braintree*, see p. 253. 20 M. *Brockton*, an industrial city with (1905) 47,794 inhab.; 27 M. *Bridgewater*, a pleasant village, with (1905) 6754 inhab., a large State Normal School, foundries, and iron-works. — 35 M. *Middleboro*, a manufacturing town with (1905) 6888 inhab., is the junction of lines to *Fall River* and *Newport* (see p. 253), etc. — From (46 M.) *Tremont* a branch-line runs, viâ *Marion* and *Mattapoisett* (two pleasant little summer-resorts), to (15 M.) **Fairhaven** (**Tabitha Inn*, open all the year round, $ 4-5), opposite *New Bedford* (ferry). Owing largely to the liberality of Mr. Henry H. Rogers, a native of the place, Fairhaven is quite a model little town (4000 inhab.), and its *Public Library*, *Town Hall*, *Unitarian Church*, and *High*

School are interesting examples of modern buildings in various styles of architecture.

New Bedford (*Parker Ho.*, $3-4; *Mansion Ho.*, $2), a pleasant little city at the mouth of the *Acushnet*, was formerly an important whaling port and is now a busy centre of the manufacture of cotton (2,000,000 spindles; products valued at $29,469,349 in 1905). Pop. (1905) 74,362. It contains many fine old mansions and substantial public buildings. Many dismantled whalers still lie in the harbour, and the town still carries on a trade in whalebone. A beautiful drive runs round *Clark's Point*, with *Fort Taber* (good sea-views). — New Bedford is reached direct from Boston by railway (56 M.) in 1½-1¾ hr. (fare $ 1.35) and from New York (in summer) by daily steamer in 12 hrs. Steamers run from New Bedford to Wood's Hole, Martha's Vineyard, and Nantucket (pp. 277, 278).

From Tremont our train now runs to the E. 49 M. *Wareham.* 51 M. *Onset Junction*, for the line to (1½ M.) *Onset Bay*, a seaside resort. 55 M. *Buzzard's Bay* (Parker Ho., $ 2), near which is Grey Gables, the seaside home of the late President Cleveland (d. 1908), is the junction of the line to *Wood's Hole* (see R. 33).

At Buzzard's Bay begins **Cape Cod**, which stretches hence towards the E. for 35 M. and then to the N. and N.W. for 30 M. more.

The Cape gradually tapers in width from 10 M. to about 1 M. and consists almost entirely of sand, with few rocks or large trees. It encloses *Cape Cod Bay* (comp. p. 276 and see Map). The inhabitants, genuine descendants of the Pilgrims, are still very quaint and primitive in many of their ways. They form excellent seamen. The *Cranberry Bogs* produce one of the most lucrative crops of the Cape, and the scene at the cranberry harvest (Sept.-Oct.) is not unlike hop-picking in England. Fast pickers can earn $ 4-5 a day at the rate of 10 c. per 'measure' of 6 quarts. Some use an ingenious picking-machine.

62 M. *Sandwich. Joseph Jefferson* (d. 1905), the actor, is buried here in Bay View Cemetery (grave marked by a large boulder). Near Sandwich is part of the excavations for the proposed Cape Cod Canal. — 69 M. *West Barnstable*, station for (6 M.) *Osterville* (East Bay Lodge; West Bay Inn), a sea-bathing resort on the S. shore of the Cape. 73 M. *Barnstable* (*Barnstable Inn); 76 M. *Yarmouth*, junction of a line to (3 M.) *Hyannis* and (4½ M.) *Hyannis Harbor*. 85 M. *Harwich* (Belmont, $ 3; Wayside Inn, $ 2-3, both at West Harwich), is the junction of a branch to (7 M.) *Chatham*, whence stages run to *Chatham Beach* (Mattaquason, $ 3). The line now turns to the left (N.). 89 M. *Brewster;* 94 M. *Orleans;* 97 M. *Eastham;* 106 M. *Wellfleet* (Chequesset Inn, from $ 2½); 111 M. *Truro*, with a dangerous beach guarded by *Highland Light*.

120 M. **Provincetown** (*Central Ho.*, $ 2½; *Gifford Ho.*, *Pilgrim Ho.*, $ 2) is a quaint old fishing-town (cod and mackerel) with (1905) 4362 inhab. and a fine land-locked harbour formed by the final crook of Cape Cod. The town-crier is still an institution here. The *Mayflower* anchored here on Nov. 11th, 1620, and this event is commemorated by a monument (1908) on *Town* or *High Pole Hill* (good view), modelled (somewhat strangely) on the tower of the Palazzo Pubblico at Siena. There is a lighthouse on *Race Point*.

35. From Boston to Portland.

Comp. Maps, pp. 274, 232.

a. By the Eastern Division of the Boston and Maine Railroad.

115 M. Railway in 3-4½ hrs. (fare $ 2½; parlor-car 60 c.). This line runs near the E. coast of Massachusetts, New Hampshire, and Maine, affording frequent views of the ocean (seats to the right). Beyond Portland it runs on to (244 M.) *Bangor* and (450 M.) *St. John* (Canada); comp. R. 36a. — Steamers from Boston to Portland, see p. 287.

Leaving the *N. Union Station* (p. 253), we cross the *Charles River*. To the right lies *Charlestown*, with the Bunker Hill Monument (p. 273). At *Prison Point* we see the *State Prison* to the right. In *Somerville*, about 1 M. to the W. of (1½ M.) *East Somerville*, is *Prospect Hill*, with a monument erected in 1903 to commemorate the spot on which the first American flag was unfurled in 1776. We cross the *Mystic*. — From (5 M.) *Chelsea* (p. 275) a tramway runs to *Revere Beach* (several hotels), the 'Coney Island' of Boston, frequented by enormous crowds on all holidays and provided with admirable bathing facilities. It is also reached by the narrow-gauge *Boston, Revere Beach, & Lynn R. R.*, which runs along the beach to *Point of Pines* (hotel) and (9½ M.) Lynn (see below). We traverse salt-marshes, cross *Chelsea Creek* and the *Saugus*, and reach —

12 M. **Lynn** (*Seymour, Kirtland*, $ 2-3), with (1905) 77,042 inhab., a handsome *City Hall*, and a *Soldiers' Monument*. It is a well-known shoe-manufacturing town, producing 35 million pairs annually, valued at 43 million dollars. The *General Electric Co.* employs 9500 hands. View from *High Rock*. **Lynn Woods* (2000 acres) and *Lynn Shore* belong to the Boston Park System (p. 269).

Lynn is the focus of a large system of Electric Railways, extending to *Boston* (Scollay Sq.), *Salem* (p. 281), *Gloucester* (p. 283), *Newburyport* (p. 283), *Portsmouth* (p. 284), *York Beach* (p. 285), and many nearer points.

An electric tramway (13 c.) runs from Lynn to *Lynn Beach* (Red Rock Ho., $ 4) and (4 M.) Nahant (*Hotel Tudor*, $ 3; *Rockledge*. $ 2½-3; *Bay Side Inn*), a curious rock-built promontory, with fine cliffs and beaches, connected with the mainland by a narrow neck of sand. Nahant contains the seaside homes of so many leading Bostonians as to have been called 'Cold Roast Boston'. The finest point of the cliff scenery is *Castle Rock*, at the E. end of the peninsula, reached through the grounds of Senator Cabot Lodge. — *Bass Point* (Relay, Trimountain, $ 2½-3), to the S.W., is a popular resort in the style of Revere Beach. Steamboat, see p. 274.

13 M. **Swampscott** (*New Ocean Ho.*, from $ 4½; *Lincoln Ho.*, $ 3-4), a Bostonian seaside-resort, with charming combinations of rocky bluffs and sandy beaches. The main line station is ca. 1½ M. from the sea, and carriages from the hotels meet the chief trains.

A small branch-line diverging here runs along the beach to *Marblehead* (18 M. from Boston), passing *Phillips Beach*, *Beach Bluff* (Hotel Preston, from $ 4; Bellevue, $ 2½-3½; Elms, $ 2½-3), *Clifton* (Crowninshield, $ 2½-3½), and *Devereux* (Devereux Mansion, $ 2½-3), all frequented for sea-bathing.

Marblehead (*Rock Mere Inn*, from $ 4; also hotels at Clifton, Devereux, and Marblehead Neck), a seaside town with 1905) 7209 inhab., dates back

to early in the 17th cent. and is one of the oldest and quaintest places in New England. It lies on a rocky peninsula and has a fine harbour. Its maritime commerce has, however, deserted it long since, and its chief industry now is the making of shoes. Among the most noteworthy of the old Colonial buildings is the *National Bank*, built as a mansion for Col. Lee in 1768. The *Old Fort*, to the S. of the town, commands an excellent view. *St. Michael's Church* dates from 1714. *Abbot's Hall*, with its lofty tower, contains the town-offices and a public library. The *Post Office & Custom House* (1904) is a red brick building in the Colonial style. A granite monument near the station commemorates the capture of a British ship in 1776 by a Marbleheader. Marblehead was the birthplace of *Elbridge Gerry* (of 'Gerrymander' fame; 1744-1814) and is the scene of *Whittier's* poem 'Skipper Ireson's Ride'. The famous encounter between the 'Chesapeake' and the 'Shannon' took place off the coast here, and most of the crew of the 'Constitution' (p. 274) were recruited in the town. See *Samuel Roads'* ‚History of Marblehead' and *Bynner's* historical novel 'Agnes Surriage'.

Marblehead Neck (Nanepashemet Ho., $ 3½-6; Oceanside, from $ 3), forming the outer arm of the harbour and connected with the mainland by a narrow causeway, is a popular bathing-place and the headquarters of the Eastern and Corinthian Yachting Clubs. The Marblehead course is one of the favourite yacht-racing resorts on the coast, and the little harbour is no stranger to such famous boats as the 'Volunteer', the 'Mayflower', the 'Puritan', and the 'Reliance'.

As we approach the next station, the notorious *Witch Hill* (comp. p. 282) is seen to the left.

17 M. **Salem** (*Essex House*, $ 2½-3), the mother-city of Massachusetts, is a quiet and ancient town with (1905) 37,627 inhab. and a good harbour flanked by two crumbling forts. Its former commerce with the East Indies has now given way to a small coasting trade, and a few manufactures are also carried on.

Naumkeag, on the site of Salem, was first visited by Roger Conant, one of the Cape Ann immigrants, in 1626, and a permanent settlement was made here by Gov. Endicott two years later. Gov. Winthrop landed here in 1630, and for a time Salem was the capital of Massachusetts. In 1692 Salem was the scene of the extraordinary witchcraft delusion, of which mention is made below. The legislature of Massachusetts met at Salem in 1774 (the last time under the English Crown) and issued a call for a Continental Congress. Privateersmen from Salem were very active during the war. After the war Salem engaged in the East India trade, and many of its citizens attained great wealth and influence. Indeed it is said that about 1810 a Salem merchant was the largest ship-owner in the world. Among the famous natives of Salem are *Nathaniel Hawthorne* (1804-64), who was Surveyor of the Port here from 1846 to 1850; *W. H. Prescott* (1796-1859), the historian; *Maria S. Cummins* (1827-66), author of 'The Lamplighter'; *Peirce* (1809-80), the mathematician; and *W. W. Story*, the sculptor (1819-95). Comp. *Osgood and Batchelder's* 'Historical Sketch of Salem' (1879) and *Hunt and Robinson's* 'Visitors' Guide'.

The *Essex Institute*, containing interesting collections of historical paintings, portraits, and relics (open 9-5), occupies two connecting buildings in Essex St. (Nos. 132, 134), one of which is on the site of Prescott's birthplace. The *Salem Athenaeum*, 339 Essex St., a subscription library founded in 1810, occupies *Plummer Hall*, a new building in the Colonial style (1906). The *Peabody Academy of Science*, also in Essex St. (No. 161), contains the **East India Marine Museum*, with important Japanese and other ethnological, maritime, and natural history collections.

At the head of *Derby Wharf*, at the S. end of the city, is the old *Custom House*, in which Hawthorne was employed for four years (see p. 281) and the scene of the introduction to 'The Scarlet Letter'. The quaint gambrel-roofed house in which he was born is No. 27 Union St., a narrow side-street extending from Essex St. to Derby St. The *Turner House*, 54 Turner St., is pointed out as the 'House of the Seven Gables' and is shown for a small fee.

The *Roger Williams House*, 310 Essex St., is said to be that in which Roger Williams resided in 1635-36, and also to have been the scene of the preliminary examinations of some of the witches in 1692; but both these statements seem open to doubt. The *County Court House* contains original records of the witch-trials. *Gallows* or *Witch Hill*, on which the witches were put to death, is 1 M. to the W. of the city (near the tramway to Peabody; see below).

Danvers or *Salem Village*, the actual scene of the outbreak of the witchcraft delusion of 1692, lies 5 M. to the W. of Salem, on the old Andover highroad (electric tramway). Twenty innocent persons were put to death through the denunciations of eight girls (varying in age from 11 to 20), who met in the house of Samuel Parris, the too credulous minister of the parish. The house has been pulled down, and its site is marked only by a slight depression in the soil. Other spots that became memorable during this Reign of Terror are still pointed out; and a good account of it will be found in books by *Upham* and *Nevins* (1893). These spots all lie in the township of Danvers. The farm-house in which *Gen. Putnam* (1718-90) was born stands about 1 M. beyond Salem Village, at the intersection of the Andover and Newburyport roads.

About 2 M. to the N.W. of Salem (railway) is **Peabody**, the birthplace of the philanthropist George Peabody (1795-1869). The *Peabody Institute*, which he founded and endowed, contains the jewelled portrait of Queen Victoria given by her to Mr. Peabody. He is buried in *Harmony Grove Cemetery*, a little to the W. A tramway-trip may also be taken to (20 min.) *The Willows*, a picnic resort overlooking the North Shore and the outer harbour.

A charming *Drive may be taken from Salem along the 'North Shore' to (2 M.) *Beverly*, (9 M.) *Manchester*, (12 M.) *Magnolia*, and (15 M.) *Gloucester* (p. 283), traversing beautiful woods, passing numerous fine country-houses, and affording views of the sea. The drive in the opposite direction to (4 M.) *Swampscott* and (6 M.) *Lynn* is also attractive.

A branch-line runs from Salem to (4 M.) *Marblehead* (p. 280), and it is also the junction of lines to *Lawrence*, *Wakefield*, *Lowell*, etc.

On leaving Salem the train passes through a tunnel, 200 yds. long, and crosses the North River.

19 M. **Beverly** (*Clayton*, $ 2), another ci-devant seaport, with (1905) 15,223 inhab., now given over to the making of shoes, is the junction of a branch-line to Gloucester and Rockport.

From Beverly to Gloucester and Rockport, 17 M., railway in ¾ hr. (fare 43 c.). This line follows the so-called **North Shore**, with its fine series of beaches and the innumerable seaside villas of well-to-do Bostonians, to the extremity of *Cape Ann*. Among the numerous authors and artists who have frequented this lovely bit of sea-coast are Longfellow, Holmes, Whittier, Bayard Taylor, W. M. Hunt, J. Freeman Clarke, Susan Hale and James T. Fields. Passing *Montserrat*, *Pride's Crossing*, *Beverly Farms* and *West Manchester*, all with handsome country-houses, we reach (7 M.) **Manchester-by-the-Sea** (*Masconomo*, from $ 4; **Brownland Cottages*, from $ 3), one of the chief resorts of the North Shore. One of its special features is the *Singing Beach* (large bath-house), the white sand of which emits a musical sound when stirred. The *Coolidge Memorial Library* is

interesting. — From (9 M.) *Magnolia Station* omnibuses run to (2½ M.) **Magnolia** (*Oceanside*, from $ 4; *Magnolia*, burned down in 1907 but to be rebuilt; *Aborn*, $ 4; *Hesperus*, from $ 3; *North Shore Grill*, adjoining the Magnolia, a fashionable restaurant), another pleasant little watering-place on a rocky bluff, adjoined by the fine *Crescent Beach* (large bathing establishment). The beautiful woods round Magnolia are among its special charms. A little to the E. is the wonderful *Rafe's Chasm* (60 ft. deep and 6-10 ft. wide), opposite which is the black reef of *Norman's Woe*, immortalized by Longfellow in 'The Wreck of the Hesperus'. A handful of Penobscot Indians generally camp near Magnolia in summer and sell baskets, etc. The plants which have given name to the place (in bloom in July) grow in a swamp near the station.

13 M. **Gloucester** (*Surfside*, from $ 2½), a quaint and foreign-looking city with (1905) 26,011 inhab., is one of the largest fishing-ports in the world, employing 5-6000 men in its fleets. Among the foreign vessels which put into its safe and capacious harbour are many Sicilian barques, bringing salt for the fish-curers. Gloucester is a great resort of artists, owing partly to the picturesqueness of the town itself and partly to the fine scenery of *Cape Ann* (p. 282). The outer harbour is protected by *Eastern Point*, with a lighthouse. Here lies (2½ M.) *East Gloucester* (Hawthorne Inn, $ 3; New Rockaway, from $ 2½; Beachcroft, Delphine, etc., $ 2-3), reached by electric tramway from the station, a pleasant sea-bathing resort, affording a striking *View of many-spired Gloucester. Elizabeth Stuart Phelps (Mrs. Ward) has her summer-home here (see her 'Old Maid's Paradise'), and Rudyard Kipling has celebrated Gloucester's fishing folk in 'Captains Courageous'. The *Bass Rocks* and *Good Harbor Beach* (Thorwald, $ 2½-5; Moorland, from $ 3) lie a little to the N.E., facing the twin lighthouses on *Thatcher's Island* (automobile omnibuses from the railway station). Near *West Gloucester* lies the picturesque *Mount Anne Park*. A favourite outing from Gloucester is that '*Round the Cape*' (14 M.), and excursions may also be made to (3 M.) *Rafe's Chasm* (see above) and to *Norman's Woe* (see above).

The railway ends at (17 M.) *Rockport* (Straitsmouth Inn, $ 3½-5), where a huge breakwater has been constructed by the U. S. Government. An electric tramway runs hence, passing large granite quarries, to (2 M.) *Pigeon Cove* (Ocean View Ho., Glen-Acre, $ 2½-3), a summer-resort near the end of *Cape Ann*. Cars also run from Rockport to the (1½ M.) *Land's End* (Turk's Head, $ 3-5). To complete the round of the Cape we go on by trolley to *Lanesville*, *Bay View*, *Annisquam* (Overlook, $ 2½-3½), and *Riverdale*, and so back to Gloucester.

Returning to the main line, we soon reach (23 M.) *Hamilton & Wenham*. The former is the seat of the *Myopia Hunt Club*, with the best golf-links in New England. The ice of *Wenham Lake* is known almost all over the world; the ice-houses are seen to the left. — 28 M. *Ipswich* (Agawam Ho., $ 2-2½), a quaint little town, with 4658 inhab. and a good golf-course. We cross the *Parker River*.

38 M. **Newburyport** (*Wolfe Tavern*, $ 2½-3; *Brown Square Hotel*, $ 2), 'an ancient sea-blown city at the mouth of the *Merrimac*', with (1905) 14,675 inhab., has, like other old New England coast-towns, turned from maritime commerce to manufactures (boots, cotton, silver, etc.). The *Public Library* (State St.) occupies an old Colonial mansion in which Washington and Lafayette were entertained. The *Marine Museum*, in the same street, contains oversea curiosities. In High St. is a good *Statue of Washington*, by J. Q. A. Ward. George Whitefield (1714-70), the famous preacher, is buried in the *Old South Church* (Federal St.), behind which is the house in which William Lloyd Garrison (1805-79;

pp. 51, 258) was born. The old mansion of the eccentric *Lord Timothy Dexter* is in High St. The *Unitarian & Congregationalist Church*, in Pleasant St., is an interesting specimen of its era (1801).

About 4 M. from the Market Place, near the bridge over the Parker River, is a Monument (1905) commemorating the settlement of Newbury in 1635-50. The road to it passes a boulder, with an inscription relating to Benedict Arnold's expedition up the Kennebec to Quebec.

Electric Cars and Steamboats (on the Merrimac) ply daily from Newburyport to (4 M.) **Salisbury Beach** (*Cushing, Seaside Ho.*, from $ 1), which extends for 5 M. to the N. of the Merrimac. A tramway runs to ($2^1/_2$ M.) **Plum Island** (*Plum Island Ho.*, $ $2^1/_2$-3), a long sand-dune running S. from the mouth of the Merrimac for 9-10 M. A steamboat also ascends the Merrimac to (11 M.) *Haverhill*. Other points of interest in the neighbourhood are ($3^1/_2$ M.) *Indian Hill Farm*, the home of Ben. Perley Poore (1820-87; relics); the *Devil's Den*, a cave 2 M. to the S.; the *Chain Bridge* across the Merrimac, 3 M. to the N., leading to *Deer Island*, the home of Harriet Prescott Spofford.

A branch-railway and an electric car line run to (5 M.) *Amesbury*, long the home of John G. Whittier (1807-92; comp. p. 286), who has celebrated this whole neighbourhood in his poems. His house is maintained as a memorial of the poet.

In leaving Newburyport we cross the *Merrimac* by a bridge 500 yds. long (view). Beyond (41 M.) *Salisbury* (electric line to *Salisbury Beach*) we traverse the *Folly Hill Woods* and enter *New Hampshire* ('Granite State'). Farther on we cross salt-marshes. 48 M. *Hampton* (Whittier, $ 2-$2^1/_2$) is the station for **Hampton Beach** (**Boar's Head*, $ 4; *Ocean Ho.*, R. from $ 1), 3 M. to the S.E. (stages at the station), and from (50 M.) *North Hampton* stages run to ($3^1/_2$ M.) **Rye Beach** (*Farragut*, from $ 5; *Sea View*, $3^1/_2$-4; *Sawyer Ho.*, $ 3, etc.), the most frequented of the New Hampshire beaches. At the N. end of the part of Rye Beach known as *Jenness Beach* is *Straw Point*, a station of the submarine cable to England and also a U. S. life-saving station. An electric tramway connects Rye Beach with Portsmouth (see below). — 53 M. *Greenland* is the station for ($2^1/_2$ M.) the N. end of Rye Beach.

58 M. **Portsmouth** (*Rockingham*, from $ 3; *Kearsarge*, $ 2-3; *Langdon*, $ 2), the only seaport of New Hampshire, is situated on a peninsula 3 M. from the mouth of the *Piscataqua*. It is a quaint and quiet old town, with 10,637 inhab. and pleasant tree-shaded streets. Many of the old Colonial houses are interesting. *St. John's Church*, rebuilt in 1806, contains some curious old relics. The *Athenaeum* contains a library and museum. In Haven Park is a statue of *General Fitzjohn Porter* (1822-1901), by J. E. Kelly (1904). On *Continental* or *Fernald's Island*, in the river, is the *Kittery U. S. Navy Yard* (ferry from Daniel St.), where the 'Kearsarge' was built. The treaty of peace between Russia and Japan (Sept. 5th, 1905) was signed here in the *General Store House* (commemorative tablets). The island is connected by a bridge with *Kittery*, a village on the N. bank, with some interesting Colonial houses. T. B. Aldrich (1836-1907; house in Court St., with relics), James T. Fields (1817-81), and B. P. Shillaber ('Mrs. Partington'; 1814-90) were born at Ports-

mouth. In Vaughan St. (No. 32) is the house to which Daniel Webster brought his young bride in 1808. *Seavey's Island* was occupied in 1898 by the captive seamen of Adm. Cervera's fleet.

Stages run daily to (2½ M.) *Newcastle* (*Wentworth Ho., from $ 5), a summer-resort on an island at the mouth of the harbour. Close by, at *Little Harbor*, is the interesting old mansion of the Wentworth family (1750).

From Portsmouth to the Isles of Shoals, 10 M., steamer several times daily in 1 hr. (return-fare $ 1). The *Isles of Shoals are nine rocky islands, 6-9 M. from shore, frequented as summer-resorts on account of their pure sea-air and immunity from mosquitoes. The chief are *Appledore* (Appledore Ho., $ 3½, 400 beds) and *Star Island* (Oceanic Ho., $ 3, 300 beds). On *White Island*, to the S.W., is a powerful lighthouse. See *Celia Thaxter's* 'Among the Isles of Shoals' and *Lowell's* 'Appledore'.

From Portsmouth to York Beach, 11 M., *York Harbor & Beach Railway* in 35 min. (fare 35 c). This line serves another series of beach-resorts to the N. of Portsmouth, which may, perhaps, be still better visited by trolley (charming ride). — The railway crosses the Piscataqua to *Kittery* (p. 284) and bends to the right. 7 M. *Seaburg;* 9 M. **York Harbor** (*Marshall*, $ 3½-4½; *Albracca*, $ 3-3½; *Yorkshire Inn*, $ 3; *Glen's*, *Varrell Ho.*, $ 2-3), the most fashionable part of the line of beaches, at the mouth of *York River;* 10 M. *Long Beach* (Mitchell's, $ 1½-2½), at the Long Sands. — 11 M. **York Beach** (*Ocean Ho.*, $ 2½ 3½; *Young's*, $ 2½-4; *Fairmount*, $ 2½; *Hasting-Lyman*, *Wahnita*, $ 2-3), adjoining *Cape Neddick*, with the rocky 'Nubble, (lighthouse) off its extremity. Some way to the N. of York Beach station is the **Passaconway Inn* ($ 5), which is also frequented by the best class of visitors. About 3 M. to the N. of this is **Bald Head Cliff* (85 ft. high), beyond which lies *Ogunquit Beach* (The Ontio, Sparhawk Hall, $ 2½-4). Inland from York Beach rises (6 M.) *Mt. Agamenticus* (673 ft.; *View).

On leaving Portsmouth we cross the Piscataqua and enter *Maine* ('Pine Tree State'), a state with 1500 lakes and ponds of an aggregate area of 2300 sq. M., 5000 rivers and streams, and nearly 20,000 sq. M. of forest, harbouring immense quantities of game. At (70 M.) *Conway Junction* diverges a line to North Conway (p. 321). At (78 M.) *North Berwick* the Eastern Division of the Boston and Maine R. R. crosses the Western Division, and becomes in reality the W. or inland route. [The stations on both routes are the same, but as most of them lie near the sea they are better described in R. 35 b (see below).]

115 M. *Portland*, see p. 287.

b. By the Western Division of the Boston and Maine Railroad.

115 M. Railway in 3-4 hrs. (fares as at p. 280).

The train starts from the *N. Union Station* (p. 253) and follows practically the same course as the E. Division till beyond the *Mystic* (comp. p. 280). It then keeps due N., while the E. Division turns to the N.E. 7 M. *Melrose*, with a winter-resort named the *Langwood Hotel*. To the left are **Middlesex Fells*, 1800 acres of forest, crag, and pond, reserved as a public park. — 10 M. *Wakefield*, the junction of a line to (30 M.) *Newburyport* (p. 283).

23 M. **Andover** (*Phillips Inn*, well spoken of, $ 2-3), an academic town with (1905) 6632 inhab., is well known through the *Andover Theological Seminary*, one of the chief educational institutions of the Congregationalists, which, however, was removed to Cambridge

and allied with Harvard University in 1908. *Phillips Academy* (450 pupils), the *Punchard High School*, and the *Abbott Female Seminary* also enjoy a considerable reputation. Mrs. Harriet Beecher Stowe (1811-96) moved to Andover just after publishing 'Uncle Tom's Cabin' (comp. p. 289), and is buried in the private cemetery of the trustees of Phillips Academy. Her house is now the Phillips Inn (p. 285). Mrs. Ward (Eliz. Stuart Phelps) was born here and wrote 'The Gates Ajar' in the still-standing *Phelps House.* At *North Andover* (on the Peabody & Lawrence branch) are the large Stevens Cotton Mills, and the homestead of *Anne Bradstreet* (d. 1672), the first American poetess. — 26 M. *South Lawrence* lies on the right bank of the *Merrimac*, opposite **Lawrence** (*Franklin Ho.*, $ 2-3; *Brunswick*, *Essex*, $ 2), one of the largest industrial cities of New England, with (1905) 70,050 inhabitants. Its numerous large and substantial *Cotton* and *Woollen Mills*, employing over 30,000 hands and producing annually 200 million yds. of cloth, line both sides of the Merrimac and are driven mainly by water-power supplied by the construction of a huge dam in 1845 (fall of 28 ft.; 12,000 horse-power; value of manufactures in 1905, $ 48,036,593).

The *Washington Mills*, with 6500 hands, produce annually 14,000,000 lbs. of yarn and 12,000,000 yds. of cloth. — The *Wood Worsted Mill*, 1/3 M. in length, is the largest mill-building in the world. — Other large mills are the *Arlington* (7000 hands) and the *Pacific* (5500 hands).

Beyond South Lawrence we descend along the right bank of the Merrimac† to (32 3/4 M.) *Bradford* (with an old and famous academy for girls) and (33 1/4 M.) **Haverhill** (*Webster*, *Eagle*, $ 2-3), a shoe-manufacturing town with (1905) 37,830 inhab. (manufactures in 1900, $ 24,394,530). In Main St. is a poor statue of Hannah Duston (p. 314). The poet Whittier (p. 284) was born in 1807 near *Lake Kenoza* (the scene of 'Snowbound'; house marked by a bronze tablet), 1 M. to the N.E. of Haverhill. A branch-line runs from Haverhill to (16 M.) *Newburyport* (p. 283).

We now leave the Merrimac and enter *New Hampshire* (p. 284). 41 M. *Newton Junction*, for *Merrimac*. To the left lies *Country Pond*; to the right rises *Morse Hill* (312 ft.). 51 M. *Exeter* (Rail. Restaurant; pop. 4922), with another Phillips Academy (comp. above), which has numbered among its pupils Daniel Webster, George Bancroft, and Edw. Everett. To the right flows *Exeter River*. — 68 M. *Dover* (American Ho., $ 2-2 1/2), a cotton and woollen manufacturing city, with 13,207 inhab., settled in 1623, lies on the *Cocheco*.

Dover is the junction of lines to (28 M.) *Alton Bay*, on Lake Winnipesaukee (p. 316), and to *Portsmouth* (p. 284).

Just after crossing the *Salmon Falls River* at (72 M.) *Salmon Falls*, with its cotton-mills, we enter *Maine* (p. 285). At (78 M.) *North Berwick* the W. Division intersects the E. Division (see p. 285). 85 M. *Wells Beach* (Wenonah, $ 2). To the right we have a view of

† Some trains cross the Merrimac and enter Lawrence proper.

the sea. From (90 M.) *Kennebunk* a line runs to (5 M.) **Kennebunkport** (*Old Fort Inn*, from $4; *Oceanic*, from $3; *Cliff Ho.*, *Parker Ho.*, *Nonantum*, $2-3), an old maritime village at the mouth of the *Kennebunk*, now in repute among summer visitors, who congregate chiefly at *Kennebunk Beach* (Atlantis, from $4; Eagle Rock, Naragansett, from $2½), on *Cape Arundel*.

99 M. *Biddeford* (Thatcher, $2-2½) and (100 M.) *Saco* (Saco Ho., $2; Bay View, at Ferry Beach, $2½-4), two busy towns (16,145 and 6122 inhab.), on opposite sides of the *Saco River*, which here falls 55 ft. and furnishes power for cotton-mills, sawmills, and machine-shops.

Steamers descend the Saco to (8 M.) *Biddeford Pool* (Ocean View, $2½-3) at its mouth, connecting at *Camp Ellis* with the *Orchard Beach R. R.* (see below).

104 M. **Old Orchard Beach**, one of the best and most popular bathing-beaches in New England, was largely destroyed by a fire in Aug., 1907. The *Old Orchard House* ($4) was the only large hotel that survived, but probably most of the others will be rebuilt. The pier is 1950 ft. in length. The train runs close to the beach, which extends from the Saco to (10 M.) Scarboro. The Beach Railway runs from *Camp Ellis* (see above) to *Old Orchard Beach Junction*, on the E. Division.

From (109 M.) *Scarboro* omnibuses run to (3 M.) *Scarboro Beach* (Atlantic, $2½-3), 2 M. to the S. of which is *Prout's Neck* (Jocelyn Ho., $2½-4½; Checkley, $2½-3½; Southgate Ho., $2½). — Farther on, the train crosses the *Fore River* and enters the Union Station at —

115 M. **Portland.** — *Congress Square Hotel, $3-5; Lafayette, Congress St., cor. of Park St., $3-5, these two with dining-rooms at the top of the house (view); Falmouth House, Middle St., in the centre of the town, $3-5, R. from $1; Preble House, Monument Sq., $3-5, R. from $1; Columbia, $2½-5; West End, opposite the Union Station, $2½-3½; Jefferson, R. from $1. — *Cordes Café*, 489 Congress St.

Steamboats run regularly from Portland to *Boston* (daily, in 8 hrs.; $1¼, stateroom $1-2), to *New York* ($5, including cabin-berth, stateroom extra), to *Eastport* and *St. John*, and to *Mt. Desert* (see p. 291). Small steamers ply frequently from the Custom House Wharf to *Harpswell*, *Peak Island*, *Cushing's Island*, and other points in *Casco Bay*. In winter Portland is the American port of the Dominion and Allan Ocean Steamers.

Electric Tramways run through the principal streets, to the railway stations, and to various points in the environs.

British Vice-Consul, *Mr. J. B. Keating.*

Portland, the largest city in Maine, with (1900) 50,145 inhab., is finely situated on a hilly peninsula projecting into *Casco Bay*. Its harbour is deep and well protected by six forts, and its commerce with Great Britain is considerable. The number of trees in its streets have earned for it the name of 'Forest City'.

The town was originally founded in 1633 and was at first named *Machigonne* or *Casco* and afterwards *Falmouth*. It suffered severely at the hands of the French and the Indians and in 1775 was almost entirely destroyed by the British. After the war it was rebuilt and in 1786 received the name of Portland. Among the distinguished natives of Portland are Longfellow (1807-82), N. P. Willis (1807-67), 'Fanny Fern' (Mrs. Parton;

1811-72), Neal Dow (1803-97), Thomas B. Reed (d. 1902), S. S. Prentiss (1808-50), the orator, and Commodore Preble (1761-1807), of Tripolitan War fame.

Most of the principal buildings are in CONGRESS STREET, which runs the whole length of the city, from the *Western Promenade* on *Bramhall's Hill* (175 ft.), to the *Eastern Promenade* on *Munjoy's Hill* (160 ft.). The *Observatory* (fee) on the latter affords an excellent *View of the city, the bay, the White Mts. (p. 320), and the Sandwich Mts. (panorama by Abner Lowell). Near the middle of Congress St. is the *City Hall*, rebuilt since a disastrous fire in 1908; and hard by, in Middle St., is the tasteful *Post Office*, with a Corinthian portico. A little to the E. of the City Hall, Congress St. passes *Lincoln Park* (right) and the *Roman Catholic Cathedral* (left), and a little farther on is the *Eastern Cemetery*, with the graves of Commodore Preble (see above) and Commanders Burrowes and Blythe of the 'Enterprise' and 'Boxer' (p. 292). At the intersection of Congress St. and State St. (see below) is a good *Statue of Longfellow*, by Franklin Simmons. The *War Monument* in Monument Sq., which was the site of a gun-battery in 1775, is by the same artist.

State Street, leading from Deering's Oaks (see below) to the harbour, contains some good specimens of old Colonial houses and three fine churches *(Congregational*, *St. Luke's Cathedral*, and *St. Dominic's).* — The house in which *Longfellow* was born stands at the corner of Fore St. and Hancock St., close to the Grand Trunk R. R. Station. The *Wadsworth-Longfellow Mansion* (adm. 25 c.), in which he lived, is next door to the *Preble Hotel* (p. 287). It was erected by Gen. Peleg Wadsworth, the poet's grandfather, in 1785-86; and an addition, built in 1903, contains the library of the *Maine Historical Society.*

Among the other chief buildings are the new *U. S.* and *County Court Houses*, in Federal St.; the *Custom House*, near the Boston steamboat-wharf; the *Maine General Hospital;* the *Universalist Church*, with an organ of 5000 pipes; and the buildings of the *Y. M. C. A.*, the *Natural History Society*, and the *Public Library* (60,000 vols.). *Deering's Oaks Park* lies a little to the N. of the W. end of Congress Street.

Environs. Pleasant drives or trolley-rides may be taken to *Evergreen Cemetery* (2½ M.); to *Riverton Park* (5½ M.); to *Falmouth Foreside* (6 M. to the N.), *Underwood Springs*, and *Yarmouth Foreside* (12 M.); and to (3 M.) *Cape Cottage Park* (with theatre, casino, and restaurant), and (9 M.) the *Twin Lighthouses*, both on **Cape Elizabeth*, to the S. Among the pleasantest of the longer trips is that to the *Bay of Naples* (p. 304; there and back $ 1½).

**Casco Bay*, an admirable yachting water, is crowded with pretty wooded islands, many of which are favourite summer-resorts, especially (3½ M.) *Cushing's Island* (fine cliffs), *Peak Island* (2½ M.; Peak Island Ho., $ 2-3; Avenue, $ 1½-2, and many others; frequented by day-excursionists; summer-theatre), *Long Island* (4 M.; Dirigo Ho., $ 2; Granite Spring Ho., $ 1½-2), and *Little Chebeague* (6 M.; Hamilton, $ 2½-3½; Sunnyside, $ 2).

36. From Portland to Mount Desert.

a. Viâ Bangor.

191 M. Maine Central Railroad to (179 M.) *Bar Harbor Ferry* in 5½-7¾ hrs.; steam-ferry thence to (12 M.) *Bar Harbor* in ¾ hr. (through-fare $5; parlor-car $1.25, sleeper $2). From Boston to *Bar Harbor* by this route in 9½-12 hrs. (fare $7; parlor-car $1.50, sleeper $2).

Portland, see p. 287. The line runs to the N., affording a good retrospect of the city, and soon crosses the *Presumpscot*. 11 M. *Cumberland Junction* (p. 297). We cross the Grand Trunk Railway at (15 M.) *Yarmouth Junction* (comp. p. 303). — 29 M. **Brunswick** *(Eagle*, $2; *Rail. Restaurant)*, a flourishing town of 6806 inhab., lies at the head of the tidal waters of the *Androscoggin*, which forms three small falls here. It is the seat of *Bowdoin College* (pron. 'Bōd'n'; near the station), one of the leading institutions of learning in New England (400 students). The *Walker Art Building*, belonging to the college, is adorned with frescoes by Elihu Vedder, Abbott Thayer, Kenyon Cox, and John La Farge, and contains about 150 paintings, including portraits of Madison and Jefferson by Gilbert Stuart and works attributed to Hogarth, Brouwer, Berghem, Hondecoeter, Van Dyck (*Portrait), Rubens, and Teniers. 'Uncle Tom's Cabin' was written at Brunswick, while Mrs. Stowe's husband was a professor at Bowdoin College (1851-52). Longfellow was also a professor at Bowdoin College in 1829-35; and Hawthorne, Longfellow, President Pierce, Governor Andrew (p. 276), and Chief Justice Fuller are among its alumni.

Brunswick is the junction of the line to *Bath* and (56 M.) *Rockland* (R. 36b). Other lines run to (20 M.) *Lewiston* (p. 298) and *Leeds Junction* (p. 298).

Beyond Brunswick we cross the Androscoggin and run to the N. along the *Kennebec* (to the right). 48 M. *Iceboro*, with the largest ice-houses in the world (on the river; 1,000,000 tons of ice are shipped from the Kennebec yearly to all parts of the world). — 56 M. *Gardiner* (Johnson Ho., $2), a city with 5500 inhab., engaged in wood-sawing in summer and ice-cutting in winter, is also connected with Augusta by a picturesque electric tramway, running through *Hallowell* and along the W. bank of the Kennebec.

62½ M. **Augusta** (*Augusta Ho.*, from $3; *Cony Ho.*, $2-2½), the capital of Maine, with 11,683 inhab., lies on both sides of the Kennebec, about ½ M. below the huge *Kennebec Dam*, which affords water-power for its factories. The chief buildings are the *Post Office*, the *Lithgow Library*, the *City Hall*, and the solid granite *State House*, the dome of which commands a beautiful view. On the E. side of the river are the *State Insane Asylum* and the *Kennebec Arsenal*. Augusta was the home of *J. G. Blaine* (d. 1893). There is a *Soldiers' Monument*. A memorial tablet marks the historic *Fort Western* (1754). Steamers ply from Augusta to Gardiner (see above), connecting with large boats for Portland, Boston, etc.

In leaving Augusta we cross the Kennebec, which now runs to our left. At (80 M.) *Winslow*, with its huge pulp-mills, we cross it again, just above near its confluence with the *Sebasticook* and immediately over the *Taconic Falls*. To the left, at the confluence of the two rivers, is a block-house which formed part of old Fort Halifax (1744). — 82 M. *Waterville* (Elmwood Ho., from $2; Rail. Restaurant), with 9477 inhab., large cotton-mills, and a Baptist college (Colby College; 230 students), is the junction of the Lewiston division of the Maine Central R. R. (see p. 300) and of a branch-line to (18 M.) *Skowhegan* (Coburn, $2-2½; 5180 inhab.). Gen. Ben Butler (1818-93) was a student of Colby College. — We now cross and leave the Kennebec, and pass over the watershed between that river and the Penobscot. From (95½ M.) *Burnham* a branch-line runs to (34 M.) *Belfast* (Windsor, $2-2½; 4615 inhab.), on Penobscot Bay; and from (103 M.) *Pittsfield* another runs to (8 M.) *Hartland*. To the right flows the *Sebasticook*. 110 M. *Newport* is the junction of a line running N. to *Dexter* (Exchange, $2-2½), *Dover* (Blethen Ho., $2), and (66 M.) *Moosehead Lake* (see p. 301). 131½ M. *Northern Maine Junction* (p. 300).

137 M. **Bangor** *(Bangor Ho.*, well spoken of, $2½-4; *Penobscot Exchange*, $2½-4; *Windsor*, $2-2½; *Rail. Restaurant)*, the third city in Maine, with 21,850 inhab., is commandingly situated on the *Penobscot*, at the head of navigation and 60 M. from the ocean. Its chief industry is the sawing and shipment of timber, about 150 million ft. of lumber being annually surveyed here, mainly from the vast forests of N. Maine. Among its chief buildings are the *Court House*, the *City Hall*, the *Custom House*, the *Theological Seminary*, and the *Y. M. C. A. Building*.

From Bangor to St. John (in New Brunswick), 205 M., railway in 6¾-7¼ hrs. (from Boston to St. John, 450 M., in 15-17 hrs.). This line is a continuation of that described above from Portland to Bangor, and passes through a district of great importance to the sportsman. — 8½ M. *Orono*, with the University of Maine (775 students). — 13 M. *Oldtown*. The second railway in the United States, opened in 1836, ran from Oldtown to Bangor. — At (59 M.) *Mattawamkeag*, we join the C. P. R. route from Montreal to St. John (about 75 M. to the E. of Greenville; comp. p. 301). — Beyond (115 M.) *Vanceboro* (Rail. Restaurant) the train crosses the *St. Croix*, and enters *New Brunswick* (Canada). 121 M. *McAdam Junction*, for the line to (43 M.) *St. Andrews* (*Algonquin Hotel, $ 3-5). — 161 M. *Fredericton Junction*, for (22 M.) Fredericton (*Queen's*, *Barker*, $ 2-3; pop. 7117), the capital of New Brunswick, whence we may descend the St. John River (fine scenery) by steamer to (84 M.) *St. John* (see *Baedeker's Canada*). — 205 M. St. John (*Royal*, $ 3-4; *Dufferin*, $ 2½-3; *Victoria*, $ 2-3; *New Victoria*, $ 2-2½), the commercial metropolis of New Brunswick (pop. 40,711), finely situated at the mouth of the St. John River.

From Bangor to Fort Kent (219 M.) and Van Buren (234 M.), *Bangor & Aroostook Railroad* in 8 hrs. (fares $8.65, $7.55; parlor-car to Caribou $1; sleeper, $2). This railway opens up the 'Aroostook Region', which is full of opportunities for the sportsman and angler. The arrangements for guides, camps, and inns are similar to those in the Moosehead district. Full information may be obtained from the Traffic Manager of the railway, at Bangor. — From Bangor to (42 M.) *Milo Junction*, see p. 300. Beyond (48 M.) *Brownville* (Herrick Ho., $2), where a short branch-line diverges

to (13 M.) the *Katahdin Iron Works* (Silver Lake Ho., $ 2; Pleasant River Camps, 5 M. from the railway, $ 1½), we cross the Canadian Pacific Railway (comp. *Baedeker's Canada*). We then traverse the districts of *Schoodic* and *Seboois Lakes*, on which are numerous camps and sporting stations. 73 M. *Norcross* (Norcross Ho., $ 2), for *Twin Lakes* and for the (18 M.) *Debsconeag Lakes*, a fine sporting centre reached by steamer and canoe (Camps, $ 2). 80 M. *Millinocket* (Great Northern Hotel, $ 2-2½), for *Millinocket Lake*. — 90 M. *Grindstone* (Grindstone Ho., $ 2½). 101 M. *Stacyville* (East Branch Ho., $ 1) and (105 M.) *Sherman* are the nearest railway-stations to *Mt. Ktaadn* or *Katahdin* (5273 ft.), the highest mountain in Maine, which rises about 20 M. to the W. — From (104 M.) *Patten Junction* a short line runs to (6 M.) *Patten* (Palmer Ho., $ 2), a sporting centre. — At (124 M.) *Ashland Junction* the line forks. The right branch runs to the E. to (141 M.) *Houlton* (Snell Ho., Exchange, $ 2), where it connects with the C. P. R. (comp. *Baedeker's Canada*), and thence to the N. to (180 M.) *Fort Fairfield Junction* (for a line to *Fort Fairfield* and *Aroostook*, see *Baedeker's Canada*), *Caribou* (200 M.; Vaughan, Burleigh, $ 2), and (234 M.) *Van Buren* (Van Buren Hotel, $ 2; Hammond). [From Caribou a short branch-line leads to (16 M.) *Limestone* (Bangor & Aroostook Ho., $ 1½).] — The left branch runs to the N. from Ashland Junction (see above) to (167 M.) *Ashland* (Ashland Ho., Exchange, $ 2) and (219 M.) *Fort Kent* (Dickey, $ 2), which is connected by ferry across the *St. John* with *Clairs*, in Canada (see *Baedeker's Canada*).

From Bangor to Searsport, 34 M., *Bangor & Aroostook Railroad* in 1½ hr. (fare $ 1.30). From Bangor to (5 M.) *Northern Maine Junction*, see p. 300. We here turn to the left and run towards the S. — 34 M. *Searsport* is the seaport terminal of the railway, on *Stockton Harbor*, with large wharves and docks. *Penobscot Park* is a marine pleasure-resort.

From Bangor to *Greenville*, see R. 39b.

The Bar Harbor branch crosses the *Penobscot* (almost the only salmon-stream left in New England) and runs from Bangor toward the S.E. — 166 M. *Ellsworth*, a ship-building place with 4297 inhab., at the head of navigation of *Union River*. We pass *Green Lake* (well stocked with land-locked salmon and trout) on the left and another small lake on the right. At (168½ M.) *Washington Junction* we have our first view of Mt. Desert (right).

From Washington Junction to Eastport or Calais, 102 M., railway in 3¾ hrs. This line forms the shortest route from Boston to the just-named points (for the sea-route, see p. 301) and runs through a region (*Washington County*) abounding in game, lakes, and ponds. — 9 M. *Franklin;* 24½ M. *Unionville;* 29 M. *Cherryfield* (1859 inhab.); 35 M. *Harrington;* 38½ M. *Columbia;* 41½ M. *Columbia Falls;* 46 M. *Jonesboro;* 53½ M. *Whitneyville;* 57 M. *Machias* (2082 inhab.). At (61½ M.) *East Machias*, the nearest railway-station to (3½ M.) *Jonesport* (p. 294), the line turns towards the N. 75 M. *Marion*. — At (86 M.) *Ayer's Junction* the line forks, one branch running to the E. to (89½ M.) *Pembroke*. (94½ M.) *Perry*, and (102 M.) *Eastport* (see p. 302), while the other continues to the N. to (98½ M.) *St. Croix Junction* and (102 M.) Calais, where we connect with the Canadian railway system (comp. R. 40 and *Baedeker's Canada*). [St. Croix is the junction of a branch-line to (17 M.) *Princeton*, the starting-point for *Grand Lake* (reached by electric launch and road) and other fishing-resorts. Good quarters may be had at *Ball's Camps*, *Sunset Camp* ($ 2), *Ouananiche Lodge*, etc.]

179 M. *Mt. Desert* or *Bar Harbor Ferry* (Bluffs Hotel, $ 2; Rail. Restaurant). The train runs alongside the steamer, which crosses *Frenchman Bay* to (191 M.) *Bar Harbor* (p. 294), sometimes calling first at *Sullivan* (Manor Inn, $ 2½-3), *Hancock Point* (Tarratine Ho., $ 2), and (185 M.) *Sorrento* (Sorrento Hotel, $ 3½-6, with good café-restaurant), three pleasant resorts on the mainland.

b. Viâ Rockland.

156 M. Maine Central Railroad to (86 M.) *Rockland* in 3¾ hrs.; Steamer from Rockland to (70 M.) *Bar Harbor* in 6-7 hrs. (through-fare $ 3½).

As far as (30 M.) *Brunswick* this route coincides with that above described. Here we diverge to the right and soon reach (38 M.) *Bath* (Shannon, Phœnix, $ 2), a small ship-building town with 10,477 inhab., on the Kennebec, 12 M. from the sea.

Vessels of the *Eastern Steamship Co.* ply daily between Bath and Boston (fare $ 1½). These go on up the Kennebec to Gardiner, where they connect with a smaller steamer for Augusta (see p. 289). At Bath they connect with small steamers plying down the Kennebec to *Popham Beach* (Riverside, $ 2), *Boothbay* (Menawarmet Ho., $ 3; Oak Grove Ho., Boothbay Ho., from $ 2), *Squirrel Island* (Squirrel Inn, $ 3), *Mouse Island* (Samoset Ho., $ 3), *Monhegan Island* (Albee Ho., $ 2; primitive fisher community), and other points in the charming archipelago at the mouth of the river. A little to the E. of the estuary of the Kennebec is the peninsula of *Pemaquid* (Edgemere Ho.), with prehistoric heaps of oyster-shells. Off Pemaquid the American brig 'Enterprise' captured the British brig 'Boxer' after a hard contest (Sept. 4th, 1814). Both commanders were killed (see p. 288).

Through-carriages for Rockland are carried across the river to (39 M.) *Woolwich*. 48 M. *Wiscasset*, the scene of Blanche Willis Howard's 'One Summer'; 56 M. *Newcastle & Damariscotta*. To the left lies *Damariscotta Lake*. — 86 M. **Rockland** (**Samoset*, in a large park at the breakwater, 2 M. from the city, with fine view of Penobscot Bay, $ 4-5; *Thorndike Hotel*, $ 2½-3½), a ship-building and lime-burning city, with 8150 inhab., lies on *Owl's Head Bay*, an inlet of *Penobscot Bay*. Steamers ply hence to Boston, Portland (10 hrs.; $ 1¼), Bangor, Mt. Desert, and the islands in Penobscot Bay. We here quit the railway and embark on the Mt. Desert steamer.

About 8 M. to the N. (reached by electric tramway or steamer) lies Camden (*Bay View*, *Mountain View*, from $ 2), a favourite seashore-resort, backed by fine hills (Mt. Megunticook, etc.; 1300-1450 ft.).

Steamers also ply from Rockland to Belfast (p. 290), *Bass Harbor*, *Blue Hill* (Pendleton, $ 2), *Searsport* (p. 291), and various other points.

The Mt. Desert steamer of the *Eastern Steamship Co.* leaves Rockland in the morning, on the arrival of the steamer from Boston to Bangor, and first steers to the N. through the beautiful archipelago of *Penobscot Bay*, leaving *North Haven* to the right, and passing the long *Islesboro* (Islesboro Inn, $ 5) to the left. To the left, too, on the mainland, rise the *Camden Hills* (comp above). After calling at *Dark Harbor*, on Islesboro, the steamer bends to the E. and soon enters the narrow *Eggemoggin Reach*, between the mainland on the left and *Little Deer* and *Deer Islands* on the right. It touches here at *Sargentville* and *Brooklin*, two resorts on the mainland, and at *Deer Isle*. Quitting this sound we steer first to the N.E. round *Naskeag Point* and then to the S.E. between some small islands. To the right (S.) lie *Swan Island* and (farther on) the *Placentia Islands*. The mountains of Mt. Desert come in sight ahead. Passing *Bass Harbor Head* (lighthouse), at the S. end of Mt. Desert (left), we soon turn to the N. (left) and steer between

Wagner & Debes Geog¹ Estab¹ Leipzig

0 1 2 3 Statute Miles

1 : 174900 (2.75 Miles to an Inch)

0 1 2 3 4 5 Kilomètres

Mt. Desert and *Great Cranberry Isle* (p. 297). After calling at *South West Harbor* and *North East Harbor* (p. 296), on opposite sides of the entrance to *Somes Sound* (p. 297), the steamer steers to the E., with *Bear Island* (lighthouse) to the left and *Sutton Island* to the right, and calls at *Seal Harbor* (p. 296). It then turns again to the N. and runs along the fine E. coast of Mt. Desert, passing *Otter Cliffs*, *Great Head* (p. 295), etc. *Egg Rock Lighthouse* lies at some distance to the right. About 5-6 hrs. after leaving Rockland we reach *Bar Harbor* (p. 294), passing the pretty little *Bald Porcupine Island*.

37. Mount Desert.

The island of *Mount Desert, the Indian *Pemetic*, lying just off the coast of Maine, in Frenchman Bay, about 110 M. to the E. of Portland, is 15 M. long, 4-12 M. wide, and 100 sq. M. in area. It contains about 5500 permanent inhab., but this number is greatly increased during summer. Within a moderate compass it contains a considerable variety of picturesque scenery, and its mountains, or rather hills, rising abruptly from the sea, have no parallel along the whole Atlantic coast of the United States and are much more imposing than their moderate elevation would suggest.

History. Mount Desert (accent on the first syllable) was first sighted in 1604, by Champlain, who gave it the name of '*Isle des Monts Déserts*'. In 1613 a small French colony, sent out by Mme. de Guercheville, to convert the Indians, planted the settlement of *St. Sauveur* on Somes Sound (see p. 297), but it was soon destroyed by the English (see Parkman's 'Pioneers of France in the New World'). In 1688 Louis XIV. granted the island to M. de la Motte Cadillac; but it was not till 1786 that his granddaughter, Mme. de Gregoire, came over to claim the property, — a claim that was allowed by the State of Massachusetts in 1787. The island has, however, long since passed out of the possession of this family. It was about 1850 that Mt. Desert was first visited by artists and other summer-guests, but it was not till 10-15 years later that Bar Harbor (p. 294) began to be what it now is — one of the most frequented and fashionable summer-resorts in the United States. Comp. 'Mount Desert, a History', by *Geo. E. Street* (1907).

Physical Features. The mountains of Mt. Desert extend across the centre of the island, running N. and S. in roughly parallel ridges, separated by narrow, trough-like valleys. One of these valleys is occupied by *Somes Sound*, which penetrates to the heart of the island. Thirteen main peaks are reckoned, the highest of which is Mt. Green (1527 ft.; p. 295), on the E. side. Numerous small mountain lakes and streams afford trout and land-locked salmon fishing. Prof. Shaler finds evidence that even the highest summits of Mt. Desert were submerged beneath the sea for some time after the disappearance of the ice of the glacial epoch. — The *Climate* of Mt. Desert is usually cool and refreshing in summer, but fogs are rather frequent. The water is too cold for much sea-bathing. The Village Improvement Associations have lately constructed many new paths and trails, and a 'Path Map' of the E. part of the island has been issued (1906). On the N. the island is connected with the mainland by a bridge.

Approaches. The usual approaches to Mt. Desert are indicated in R. 36. We may also go from Boston to Bar Harbor by a steamer of the Eastern Steamship Co., which starts daily at 5 p.m. and connects at *Rockland* early next morning with the Bar Harbor boat of the same company (see p. 292; through-fare $ 4, stateroom $ 1-2).

Bar Harbor. — Hotels. LOUISBURG, Atlantic Ave., from $5; MALVERN, Kebo St., from $5; ST. SAUVEUR, $3-4; NEWPORT HOUSE, near the steamer-wharf, with cottages, $3-5; MARLBOROUGH, Main St., $2½-3, R. from $1; ROCKAWAY, $2½-3; NEW FLORENCE, Main St., open all the year round, $2-4; PORCUPINE, Main St., R. from $1; GREGOIRE, an apartment-hotel, with restaurant. Decreased rates by the week or month, and before or after the height of the season. — *Boarding Houses*, $4-10 per week; *Furnished Lodgings* from $2-3 upwards.

Carriages. With one horse $1½ per hr., with two horses (1-6 pers.) $3. To the different places of interest on the island by tariff. — The favourite carriage is the 'Buckboard', an excellent easy-riding conveyance for hilly roads, made here to hold 2-15 persons.

Steamers to *Rockland*, see p. 292; *Boston*, p. 293; *Jonesport*, p. 291; *Mt. Desert Ferry*, p. 291. Steamers also ply to *Sorrento* and *Sullivan* (p. 291), to *Winter Harbor* (p. 295), on the other side of the bay, and to *Seal Harbor*, *North East Harbor*, and *South West Harbor* (see p. 296).

Boats for rowing, sailing (cat-boats), and fishing can be hired at moderate rates; also steam-launches. Row-boat 35c. per hr., with man 75c.; canoes, with Indians to paddle, 75 c. per hr. — *Yachts* frequent the harbour in large numbers, and regattas are held under the management of the *Mount Desert Yacht Racing Association*. — A visit of the *Atlantic Squadron* of the U. S. Navy is often one of the events of the season at Bar Harbor. — A *Horse Show & Fair* is held annually at Robin Hood Park.

Kebo Valley Club, Eagle Lake Road, for golf, tennis, dinners, and dances; *Mount Desert Reading Room*, Birch Point; *Pot & Kettle Club*, near the Ovens (p. 295); *Casino*, West St., with swimming-pool (all open to strangers on introduction). — *Indian Encampment*, with baskets and curiosities for sale.

Comp. the current issue of the *Bar Harbor Record* (5c.).

Bar Harbor, a popular watering-place frequented by 10-20,000 visitors every summer and almost vying in importance with Newport (p. 248), lies on the E. coast of Mt. Desert, on *Frenchman Bay*, opposite the pretty little *Porcupine Islands* and within 2 M. of the N.E. base of Mt. Green (p. 295). Its name is derived from the bar, uncovered at low water, which connects it with *Bar* or *Rodick Island*. The chief street is *Main Street* (running S. from the steamboat-wharf), from which West St., Cottage St., and Mt. Desert St. run to the W. A fine view is had, across the harbour, of the hills on the mainland, and numerous pleasant walks and drives may be made in the neighbourhood. A large breakwater protects the harbour.

The following WALK of 4½ M. shows most of the points of interest in Bar Harbor itself. Starting at the steamboat-wharf and passing the *Rockaway Hotel*, we enter the *Shore Walk or Tow Path, which, like the Cliff Walk at Newport (p. 250), runs between the sea on one hand and beautiful villas and lawns on the other. The *Mt. Desert Reading Room* (see above) stands at the beginning of the walk. A little farther on is *Balance Rock*. The stone tower farther on is at the end of a bowling-alley belonging to the *Villa Edgemere*. From *Reef Point* a path runs to the W. towards Main St. Just before reaching *Wayman Lane*, also leading to Main St., we pass a handsome house called *The Briars*. Beyond the lane we pass *The Lodge*, *Redwood*, and *Kenarden Lodge*, and reach (¾ M.) the pretty little *Cromwell Harbor*, whence a private road leads to (¼ M.) the S. end of Main St. Turning to the right, we follow Main St. for 10 min. and then turn to the left into *Mt. Desert St.* At the (10 min.) end of this street we descend *Eden St.* or the *Duck Brook Road* to the right to (5 min.) the bridge over *Eddy Brook*. Continuing to follow this road for about 1 M., with villas on both sides, the grounds on the right extending down to the bay, we reach the *Duck Brook Bridge*, whence a pleasant *Footpath ascends to the left along the brook and through the trees to (2 M.) the Eagle Lake road (p. 295). The so-called *Bay Drive* begins at the Duck

Brook Bridge. In the meantime, however, we turn at the bridge and retrace our steps along Duck Brook Road to (1/2 M.) *Highbrook Road*, which diverges to the right and runs circuitously over the hill, rejoining Duck Brook Road (Eden St.) about 1/2 M. farther on. We finally return (10 min.) to Main St. through *West St.* or *Cottage St.*, which both run to the left from Duck Brook Road.

Excursions. The ascent of *Mount Green (1527 ft.) is, perhaps, the best excursion to begin with. We may drive the whole way to the top (4 M.) by a rough road (toll 25 c. for each horse and for each passenger, 10 c. for each walker), diverging to the left from the road to Eagle Lake (the prolongation of Mt. Desert St.) about 1 3/4 M. from the village. Walkers may ascend by the same route (1 1/2-2 hrs.), but will do better to follow the *Path ascending the gorge between Mt. Green and Dry Mt. (comp. Map; sign-posts). The *View from the top includes Bar Harbor, Frenchman Bay, almost the whole of Mt. Desert, the ocean, and the coast of Maine. Good walkers may descend along the ridges (route marked by cairns) to (1 hr.) the *Otter Creek Road* (see below) and return by it to Bar Harbor. — Newport Mt. (1060 ft.), to the E. of Mt. Green and close to the sea, is ascended from the Schooner Head Road in 1 hr. The path (sign-post) leads through trees, then over the ledges by cairns. *View less extensive than from Mt. Green, but better towards the E. The descent may be made viâ the *Beehive* to Schooner Head or the Otter Creek road. — Mt. Kebo (405 ft.), between Mt. Green and Bar Harbor, is ascended by a path (2 M.). — Dry Mt. (1268 ft.) is ascended by a steep and picturesque path. — A very pleasant trip for walkers is to go to (3 M.) **Eagle Lake* (2 M. long, 1/2 M. wide, and 275 ft. above the sea; trout and land-locked salmon fishing); traverse it by boat; follow a forest-path from its S. end, below the *Bubbles* (see below), to (1 M.) *Jordan Pond* (p. 296); cross by boat to the lower end of Jordan Pond (or follow the path along either shore); and walk thence to (2 M.) *Seal Harbor* or (2 1/2 M.) *Asticou* (comp. p. 296). The boat may be ordered by telephone from the *Jordan Pond House* (rfmts.), at the lower end of Jordan Pond. With this trip may be combined an ascent of the *Bubbles* (845 and 780 ft.; paths from N. end of Jordan Pond and S. end of Eagle Lake) or *Pemetic Mt.* (1262 ft.; steep, rough trail, known as the 'Goat Trail'). The descent may be made to *Bubble Pond* (path) or to the foot of Jordan Pond (path).

The *Ocean Drive to *Schooner Head*, *Great Head*, and the *Otter Cliffs*, returning through the *Gorge*, is a fine round of 12 M. ($ 1 1/2 for each passenger). We leave Bar Harbor by Main St. and drive towards the S. At (3 3/4 M.) *Schooner Head*, named from a white stain resembling the sails of a schooner, are the *Spouting Horn* (seen to advantage in rough weather only) and the *Anemone Cave*. About 1 M. farther on we diverge to the left from the road to visit the bold and massive promontory of **Great Head*, towering 140 ft. above the water and affording a fine view. To the S. lies *Sand Beach*, near which our road runs to (1 1/2 M.) Otter Cliffs. To visit the **Otter Cliffs* (188 ft.; *View), we again diverge to the left from the road. We now turn to the right (N.) and drive back to (6 M.) Bar Harbor through the *Gorge*, between *Newport Mt.* on the right and *Dry Mt.* (see above) on the left.

Another favourite drive is to (1 1/2 M.) *Duck Brook* (see above) and thence by the *Bay Drive* (*View) to (1 1/2 M.) *Hulls Cove*, the former home of Mme. de Gregoire (p. 293). We may return viâ the so-called *Breakneck Road* and *Eagle Lake* (6 M.); and we may extend the drive beyond Hulls Cove to (2 M.) the *Ovens* (caves and archway; visited by boat at high water, or on foot at low water). — The so-called *Twenty-Two Mile Drive leads viâ the Eagle Lake Road to (7 M.) the N. end of *Somes Sound* (p. 297); then runs on the E. side of the Sound to (4 1/2 M.) *North East Harbor;* follows the coast thence viâ Seal Harbor (**Sea Cliff Drive*) to (7 M.) *Otter Creek;* and returns to (5 1/2-6 1/2 M.) *Bar Harbor* viâ either the *Gorge* or the *Ocean Drive* (see above). — *Somesville* (p. 297) is about 9 M. from Bar Harbor.

Short Steamboat Excursions may be made to *Seal Harbor*, *N.E. Harbor*, *S.W. Harbor*, *Somesville*, *Winter Harbor* (4 M.; *Grindstone Inn, from $ 4), *Sorrento* (p. 291), and *Sullivan*. The voyage *Around the Island* (1 day) is recommended.

Seal Harbor (*Glencove, Seaside,* $3-4), in a cove on the S. side of the island (9 M. from Bar Harbor), has one of the largest beaches on the island. It is a good centre for walkers. About 2½ M. (road) to the N. is **Jordan Pond*, 1¼ M. long and ¼-½ M. wide (trout and land-locked salmon fishing; boating), between *Jordan* and *Sargent Mts.* on the W. and *Pemetic Mt.* (p. 295) on the E. At its N. end rise the *Bubbles* (p. 295). *Mt. Green* (p. 295) and *Sargent Mt.* (see below) are easily ascended from Seal Harbor.

North East Harbor is a narrow inlet, penetrating the S. coast for 1 M. about 2 M. to the W. of Seal Harbor, and the group of cottages and hotels (*Kimball Ho.*, from $ 5; *Clifton Ho.*, from $ 4; *Rock End*, from $ 4) that bears its name lies on the promontory between it and Somes Sound. Like Seal Harbor and South West Harbor, it is a favourite resort of those who prefer quieter and less fashionable quarters than Bar Harbor offers. The steamboat-landing is on the E. side of Somes Sound (see p. 297) Opposite the mouth of N.E. Harbor is *Bear Island* (p. 293), and a little farther out are *Sutton Island* and the two *Cranberry Isles*. At the head of the cove, 1½ M. from the steamboat-landing, lies the prettily-situated *Asticou* (Asticou Inn, $ 3-5), at the base of *Asticou Hill* (view).

Sargent Mt. (1344 ft.), the highest but one on the island, rises about 2 M. to the N. of Asticou. We follow the road or path leading N. to the (1 M.) *Upper Hadlock Pond*, diverge here to the right, and follow the path on the E. side of the pond, crossing the brook near its head. Beyond (¼ hr.) a small waterfall the route to (¾-1 hr.) the top is indicated by 'blazes' on the trees and by small cairns on the ledges. Sargent Mt. may also be ascended on the S. side by a path diverging to the left from the path to Jordan Pond (see below) and crossing *Cedar Swamp Mt.* The *View includes a great part of the island, with the Bubbles, Green Mt., and Pemetic to the E., and Browns Mt. and the hills beyond Somes Sound to the W.; also Frenchman Bay, with Schoodic Mt. (Gouldsborough Hills) on its farther shore, and the sea, with numerous islands. The descent may be made on the N. by a path and wood-road leading to *McFarland Mt.* (761 ft., on the S.E. over Jordan Mt. to the foot of Jordan Pond, or on the E. by a trail following the pretty *Deer Brook* to the head of Jordan Pond (see above). In the last two cases we pass a pretty little lake near the top of Sargent Mt. Another route leads by the **Bluffs*, rising from Jordan Pond below Jordan Mt. The *Giant Slide*, on the W. side of Sargent Mt., ½ hr. from the road, is a great slab of rock leaning against the mountain so as to form a kind of archway. — From Asticou to *Jordan Pond* and *Eagle Lake*, see p. 295. — Drives may be taken to *Bar Harbor* (p. 294; $ 2 each), to (7 M.) *Somesville* (p. 297; $ 1¼ each), etc. Rowing and sailing trips are made to the above mentioned islands and to *S.W. Harbor*. *Somes Sound* may be visited by steam-launch ($ 5-10).

South West Harbor (*Claremont Ho.*, $ 3; *Dirigo*, $ 3, both near the steamboat-wharf; *Stanley Ho.*, on the opposite side of the harbour, $ 2½; *Holmes Ho.*, open throughout the year), on the W. side of the entrance to Somes Sound, is called at by all the regular steamers. Boating, deep-sea fishing, and fine sea-views are its chief attractions. About 3 M. to the S. is the *Sea Wall*, a curious pebble ridge, 1 M. long and 15 ft. high. Off the harbour lies *Greening Island.*

The road to (6 M.) Somesville (see below) runs to the N., between *Dog Mt.* (670 ft.) and *Robinson Mt.* (680 ft.) on the right and *Beech Mt.* (855 ft.) and *Carter Nubble* (480 ft.) on the left. About $1^1/_4$ M. from the village, beyond *Norwood Cove*, a road to the right runs to the S. of Dog Mt. and *Flying Mt.* (280 ft.) to (1 M.) *Fernald Point*, on Somes Sound, believed to be the site of the French colony of St. Sauveur (see p. 293). Farther on, the Somesville road skirts **Denning Pond* (left) for $(1^3/_4$ M.) *Somesville* (see below). — *Dog Mt., Beech Mt.*, and *Flying Mt.* are good points of view, easily ascended from S.W. Harbor. — Favourite drives lead to (15 M.) *Bar Harbor* (p. 294), viâ Somesville or Town Hill, and to *Bass Harbor*, 4 M. to the S.W.

Perhaps the finest boating excursion from S.W. Harbor is to *Somes Sound* (see below), which may be conveniently made by steam-launch (to Somesville and back in half-a-day). — A small steamer makes daily trips from S. W. Harbor, Seal Harbor, and N. E. Harbor to *Islesford (Little Cranberry)* and *Great Cranberry Isle* (fine surf at Deadman Point).

***Somes Sound** runs into the S. part of Mt. Desert Island for about 6 M., with an average width of $^1/_2$-1 M. Its scenery is fine, and no one should fail to ascend it by small steamer or row-boat (sailing dangerous on account of sudden squalls).

As we enter the Sound proper, we have *Fernald Point* (see above) on the left and *Manchester Pt.* (Indian Head Ho.) on the right. The finest point on the fjord is **Eagle Cliff*, the wall-like front of *Dog Mt.* (to the left), rising sheer from deep water to a height of 5-600 ft. (good echo). Farther on, between *Robinson Mt.* (left) and *Browns Mt.* (right), the Sound narrows to $^1/_3$ M., expanding again higher up. To the right opens a fine view of *Sargent Mt.* (p. 296). To the left are *Granite Quarries*, which supplied the material used in the piers of Brooklyn Bridge (p. 40). At the head of the Sound we enter *Somes Harbor* and reach the village of Somesville.

Somesville (Somes Ho., $ 2-3), the oldest settlement on the island, is a small village, frequented mainly by driving parties from Bar Harbor, S.W. Harbor, or N.E. Harbor, who ascend Beech Hill (see below), dine or sup at the hotel (famous for broiled chicken and 'popovers'; meals $ 1), and return in the afternoon or evening.

Beech Hill (ca. 500 ft.), 2 M. to the S.W. of Somesville (road to within 10 min. of the top), commands a fine **View, with *Denning Pond* (see above) lying sheer below its precipitous E. face. To the W. is *Great Pond* (4 M. long), beyond which rises the double-peaked *Western Mt.* (1073 and 971 ft.).

38. From Portland to the Rangeley Lakes.

Comp. Map, p. 232.

a. Viâ Lewiston and Farmington.

130 M. Maine Central Railroad to (83 M.) *Farmington* in $3^1/_4$ hrs. Narrow Gauge Railroad thence to (18 M.) *Phillips* and (47 M.) *Rangeley* in $2^1/_2$-$3^1/_4$ hrs. (through-fare $ 3.90).

From *Portland* to (11 M.) *Cumberland Junction*, see p. 289. Our train diverges here to the left and runs parallel with the Grand Trunk Railway, which it intersects at (29 M.) *Danville Junction* (see p. 303). Coaches run hence to (5 M.) Poland Springs (p. 298). — 32 M. *Rumford Junction* is the point of divergence of R. 38b. — At (35 M.) *Auburn* (Elm Ho., $ 2-$2^1/_2$; 12,950 inhab.) we cross the *Androscoggin*, obtaining a good view of the *Lewiston Falls* (52 ft.).

Just across the river is (36 M.) **Lewiston** (*De Witt*, $2\frac{1}{2}$-$3\frac{1}{2}$; *Exchange*, $2-2\frac{1}{2}$), the second city in Maine, an important manufacturing place (cotton and woollen goods, etc.), with 23,761 inhabitants. The *City Hall* and *Bates College* (440 students) are among the chief buildings. To Brunswick, see p. 289.

The train now follows the *Androscoggin* for some distance. To the right are the buildings of the *Maine Agricultural Society.* — 47 M. *Leeds Junction*, where the Androscoggin Division of the Maine Central Railway, which we follow, diverges to the left.

The train to Farmington runs through a pleasant hilly country, following the general course of the Androscoggin, which it nears at (66 M.) *Livermore Falls.* From (76 M.) *Wilton* coaches run to the N.W. to (13 M.) *Weld Pond*, frequented by trout-fishers. At (82 M.) *West Farmington* we cross the *Sandy River* on a long curved trestle. — 83 M. **Farmington** (*Stoddard Ho.* $2), a village of 1250 inhab., where we change carriages for Rangeley. A tablet here marks 'Fewacres', the home of the *Rev. Jacob Abbott* (1803-79), author of the 'Rollo Books'.

The narrow-gauge Sandy River Railway runs through a picturesque district, with *Blue Mt.* to the left, to (11 M.) *Strong*, for (15 M.) *Kingfield*, (25 M.) *Carrabasset*, and (31 M.) *Bigelow* (stage hence to Eustis, see below). From (18 M.) *Phillips* (Elwood Cottage, $2\frac{1}{2}$), we continue by the Phillips & Rangeley Railway. — From (34 M.) *Eustis Junction* a branch-line runs to (10 M.) *Green's Farm*, whence a stage plies to (5 M.) *Stockton* and *Eustis.* 41 M. *Dead River* (Dead River Ponds Camps, $2) is another starting-point for the *Dead River Region*, a popular angling district, with *Big Spencer Lake* and innumerable smaller sheets of water. — 47 M. (130 M. from Portland) **Rangeley** (*Rangeley Lake Ho.*, from $2\frac{1}{2}$), on the N.E. bank of *Rangeley Lake* (p. 299). To the right rises *Saddleback Mt.* (4000 ft.; *View).

b. Viâ Rumford Falls.

122 M. Maine Central Railroad to *Oquossoc* in $4\frac{1}{4}$-5 hrs. (through-fare $3.90, parlor-car 75c.; from Boston $6.45). This route is standard gauge all the way, and through-carriages run from Boston to Oquossoc.

From Portland to (32 M.) *Rumford Junction*, see p. 297. Our line runs towards the N., crossing the G. T. Ry. (R. 41) near (36 M.) *Elmwood Farm.* — 38 M. **Poland Springs** (800 ft.; **Poland Springs Ho.*, from $5, 450 beds; *Mansion Ho.*, from $3\frac{1}{2}$), the chief inland watering-place of Maine, with good mineral water and golf links. The springs are 2 M. from the station (carr. 50c.). Adjoining the Poland Springs House is a *Library & Art Gallery* (periodical exhibitions). Stages run from the station to (3 M.) *Wilson Springs* (The Wilson, from $3). — 40 M. *Poland* (Summit Spring Hotel, $3-5); 43 M. *Mechanic Falls*, also on the G. T. Ry. (p. 303); 57 M.

Buckfield. Beyond (64 M.) *Hartford* the line begins to ascend steadily. To the left lies *Lake Anasagunticook.* — 69 M. *Canton* is the junction of a branch-line to (11 M.) *Livermore*, on the E. bank of the Androscoggin, and also a station on the M. C. R. R. At (71 M.) *Gilbertville* we approach the *Androscoggin*, which flows to the right. 77 M. *Peru;* 81 M. *Dixfield.*

85 M. **Rumford Falls** (600 ft.; *Hotel Rumford*, $2-2½), an active little town, with 3770 inhab. and manufactures of woollen goods, chemicals, and paper. It owes its importance to the *Falls of the Androscoggin*, which descend 180 ft. in three leaps and are said to have a capacity of 40,000 horse-power. Coaches run hence to (15 M.) Bryant's Pond (p. 303) and to (18 M.) *Andover* (Twitchells, Glenellis, $2), whence connection is made by buckboard with the foot of *Lake Welokenebacook* (see below).

The line runs towards the N., passing some small stations.

113 M. *Bemis* (Camp Bemis, $2-3) lies at the foot of *Lake Mooselucmaguntic* (see below) and is regularly called at by the steamers. — 120 M. *South Rangeley* and (122 M.) *Oquossoc* (Mountain View Ho., $2-3) are both steamboat-stations on Rangeley Lake.

The ***Rangeley** or **Androscoggin Lakes**, a group of half-a-dozen small lakes, 1200-1500 ft. above the sea, connected with each other by water-ways, and covering a total area of about 80 sq. M., are a veritable sportsman's paradise and also offer the attraction of beautiful scenery and pure air. Landlocked salmon and large trout abound in the lakes, and moose, deer, and other game in the forests. There are numerous hotels and camps round the lakes, and expert guides ($3-4 a day) are easily procured. Several clubs for fishing and hunting have their headquarters here. Mosquitoes and black flies are not troublesome after July. Warm clothing is desirable. Small steamboats afford almost continuous passage from Rangeley Lake to Lake Umbagog (see below). For other routes to the lakes, see p. 303.

Rangeley Lake or **Lake Oquossoc**, the north-easternmost of the group, is 9 M. long and 1-3 M. wide. From Rangeley (p. 298) a steamer plies to *South Rangele* (see above), *Oquossoc* (see above), and the *Outlet*, at the foot (W. end) of the lake, 1½ M. to the N. of which is *Indian Rock*, with the headquarters of the Oquossoc Angling Association. — **Lake Mooselucmaguntic** (8 M. × 2 M.) is next in order, with inns or camps at *Haines Landing* ($2-3), *Bald Mountain Camps* ($2-3), *The Birches* ($2½-3½), *The Barker* ($2½-3½), *Bemis* (see above), and the *Upper Dam* (S. end; $2). Connected with this lake on the N. is the smaller *Lake Cupsuptic.* — Below the Upper Dam are *Lakes Molechunkamunk* (*Upper Richardson;* 5 M. × 1-2 M.) and *Welokenebacook* (*Lower Richardson;* 5 M. × 1½ M.). From the S. arm (hotel) of the latter to *Andover*, see above. — From the *Middle Dam* (Anglers' Retreat, $2), on the W. side of Lake Welokenebacook, a road leads to (5 M.) **Lake Umbagog** (1256 ft.), 9 M. long and 1-2 M. wide, at the S. end of which lies the *Lakeside Hotel* ($2). The White Mts. (p. 320) are visible from this lake. Coach hence to *Bethel*, see p. 303; steamer to *Errol Dam*, see p. 303; coach from Errol Dam to *Berlin*, see p. 303; to *Colebrook*, see p. 306.

Steamers also run from Lakeside and Errol Dam up the *Magalloway River* to (30 M.) **Lake Parmachenee** *(Camp Caribou)* another favourite sporting resort, 2500 ft. above the sea.

39. From Portland to Moosehead Lake.

a. Viâ Oakland.

169 M. Maine Central Railroad to (78 M.) *Oakland* in 2½ hrs.; Somerset Railway thence to (91 M.) *Kineo* in 3½ hrs. (through-fare $ 5.20; parlor-car $ 1). This is the shortest and most direct line from Boston to Moosehead Lake (277 M., in 9-10 hrs.; fare $ 7.50; sleeper $ 2, parlor-car $ 1½).

From Portland to (47 M.) *Leeds Junction* (for the line to the Rangeley Lakes), see pp. 297, 298. We continue to follow the main line. 59 M. *Maranacook* (Mohican Inn, Sir Charles Hotel, $ 2½), on the charming lake of that name. 69 M. *Belgrade* (The Belgrade, from $ 3), with the two beautiful lakes of that name (Great Lake and Long Lake) to the right (trout, bass, pickerel, perch).

At (78 M.) *Oakland* the Somerset Railway ('Kineo Short Line') diverges to the left (N.) from the M.C.R.R., which goes on to (6 M.) *Waterville*, where it joins the route described at p. 290. The next station on our line is (92 M.) *Norridgewock* (Duinnebasset Inn), on the Kennebec, the birthplace of Dr. Minot J. Savage. — We now follow the picturesque valley of the Kennebec, crossing and re-crossing the stream. 100 M. *Madison*, with wood-pulp, paper, and woollen mills; 113 M. *Solon*, with the Carratunk Falls. 118 M. *Austin Junction*, for (2 M.) *Bingham* (hotel), a convenient centre from which to reach *Carry Pond*, *Rowe Pond*, and other good fishing-camps. Farther on we skirt the long and narrow *Lake Moxie*. 143 M. *Lake Moxie Station;* 154 M. *Indian Pond*, a great fishing centre; 153 M. *Mike Morris* (Camp, $ 2), on the 'East Outlet', *i.e.* the E. source of the Kennebec, issuing from Moosehead Lake (comp. p. 301). — At (163 M.) *Somerset Junction* we pass under the Can. Pac. Railway (comp. *Baedeker's Canada*).

169 M. *Kineo* (Rockwood, $ 2), the terminus of the railway, situated near the middle of the W. side of *Moosehead Lake* (p. 301). Steamers for Mt. Kineo House (p. 301; fare 25 c.) and other points connect with the trains.

b. Viâ Bangor.

228 M. Maine Central Railroad to (137 M.) *Bangor* in 4 hrs.; Bangor & Aroostook Railroad thence to (91 M.) *Greenville* in 3¼ hrs. (through-fare $ 5.50; parlor-car $ 1, sleeper $ 2). From Boston to Moosehead Lake by this route in 10-12 hrs. (fare $ 8.50; parlor-car $ 1½, sleeper $ 2½).

From Portland to (137 M.) *Bangor*, see pp. 289, 290. The train now returns along the tracks of the M. C. R. R. to (142 M.) *Northern Maine Junction* (p. 290), where the Bangor & Aroostook Railroad diverges to the right (N.). At (167 M.) *South Lagrange* we unite with the line coming from Oldtown (p. 290). At (179 M.) *Milo Junction* or *Stewarthurst*, with the workshops of the B. & A. R. R., the Greenville branch diverges to the left (N.) from the main line to Van Buren (see p. 290). — 192 M. *Dover & Foxcroft* is the junction of the line from Newport and Dexter (see p. 290), which

affords an alternative route from Bangor to Greenville. — 207 M. *Monsoon Junction.*

228 M. **Greenville** (*Moosehead Inn*, $ 2½), a small town at the S. end of Moosehead Lake (see below), is also a station of the Canadian Pacific Railway between Montreal and St. John (comp. *Baedeker's Canada*). It is the starting-point of most of the steamers which ply on the lake.

***Moosehead Lake**, the largest in Maine, with 400 M. of shore-line (35 M. long, 1-15 M. wide), lies about 1010 ft. above the sea and is drained by the *Kennebec River*. Its waters abound in lake-trout and other fish, and the forests surrounding it are well stocked with moose, caribou, deer, and ruffled grouse. Black flies and mosquitoes are very troublesome here in June and July. In clear weather Mt. Katahdin (p. 291) is visible to the N.E. from some parts of the lake.

From Greenville a small steamer (fare to Mt. Kineo 75 c.), connecting with the regular trains, plies in summer to *Deer Island* (Capen's Hotel, $ 2-3) and to (17 M.) *Mt. Kineo* (1760 ft.; *View; ascent facilitated by some rather giddy steps), which projects into the lake on the E. side so as to narrow it down to a channel 1 M. across. The **Mt. Kineo House* (from $ 4; 500 beds) is a favourite resort of anglers and their families. Adjacent is a small golf-course (9 holes). Opposite Mt. Kineo is *Kineo*, the terminus of the Somerset Railway (p. 300), with which it connects by a regular ferry-steamer. Also on the W. bank of the lake, at the point where the W. branch of the Kennebec issues from it (comp. p. 300), are **Gilbert's West Outlet Camps* ($ 2-3), one of the best of the comfortably equipped 'hotel-camps' that dot the shore of the lake. — Beyond Mt. Kineo the steamer goes on to (18 M.) the N. end of the lake, calling either at the *North East Carry* (Hotel; $ 2-3), or at the *North West Carry* (Seboomuc House, $ 2-3), or at both. — From the N. E. Carry a portage of 2 M. brings us to the upper waters of the *Penobscot River* (p. 291; W. branch), whence the enterprising traveller or sportsman may proceed by canoe (with guide) viâ the W. Branch to *N. Twin Lake* and *Norcross* (p. 291; 80 M.), or by the *Allagash* to the *St. John River* (Fort Kent, p. 291, 150 M.; Van Buren, p. 291, 200 M.), or by the E. branch to *Grindstone* (p. 291; 120 M.). From the N.W. Carry canoe-trips are made by the W. and N. branches of the Penobscot to (ca. 55 M.) the S. branch of the St John and then down that river to the (85 M.) Allagash, Fort Kent, or Van Buren.

From Greenville small steamers also ply to various points on *Sugar Island* and in *Lily Bay*.

Numerous attractive short trips by canoe or boat may be made from the different resorts on the lake up the various streams which flow into it.

40. From Boston to Eastport and St. John by Sea.

Campobello. Grand Manan.

Steamers of the *Eastern Steamship Co.* (International Division) leave Boston twice weekly for (280 M.) *St. John* direct (18 hrs.; fare $ 5; stateroom $ 1-5; meals extra), and thrice weekly for St. John viâ Portland (8 hrs.; fare $ 1.25), Eastport (14 hrs.; fare $ 4.75), and Lubec. The direct steamers usually leave Union Wharf at noon, while the others start at 9 a.m. The latest information should be obtained from the agents of the company (Union Wharf and 340 Washington Street) or from the daily papers. Baggage for Canada is examined on board the steamer, between Eastport and St. John.

Railway Route from Boston to *St. John*, see p. 290; to *Eastport*, see p. 291. — The latter may also be reached by railway to St. Andrews (p. 290), and thence by the steamer down the *St. Croix* (15 M.). For details, see *Baedeker's Canada*.

Boston Harbour, see p. 274. The direct steamer (see p. 301) soon passes out of sight of land, and it is only on the longest days of summer that the coast of *Maine* becomes dimly visible before nightfall. *Grand Manan* (see below) lies to the left, but is passed in the dark. The steamer then ascends through the **Bay of Fundy** (comp. *Baedeker's Canada*). As we enter St. John Harbour, we pass *Partridge Island* on the right, while the suburb of *Carleton* is seen to the left.

280 M. **St. John**, see p. 290.

The steamer viâ Eastport, on leaving Boston Harbour, turns to the left and steers to the N. to (110 M.) **Portland** (p. 287). Beyond Portland it follows a course similar to that of the Bar Harbor steamers (see p. 292), and after passing Mt. Desert, continues along the coast, with *Grand Manan* (see below) to the right. When the tide serves, the steamer reaches Eastport by the *Narrows*, between *Lubec* on the left and the island of *Campobello* (see below) on the right. At the entrance of this channel is *Quoddy Head Light* (l.), marking the E. limit of the United States. When the tide is unfavourable, we pass outside Campobello and approach Eastport from the E., with *Deer Island* to our right.

Lubec (*Hillside Ho.*, $ 2-3; *Merchants' Hotel*, $ 2), at which the steamers call in summer, is a pleasant little watering-place. The Young Men's Christian Associations of New England hold encampments at (7 M.) *N. Lubec* (The Nemattano, $ 2½-3) in summer.

180 M. (from Portland) **Eastport** (*Exchange*, $ 2), the easternmost settlement of the United States, with 5311 inhab. and an abandoned fort, is finely situated on a small island in *Passamaquoddy Bay*, connected with the mainland by a bridge. Its inhabitants are mostly fishermen and keepers of summer boarding-houses.

Steam Ferries run at frequent intervals to (3 M.) *Lubec* (see above) and (2½ M.) *Campobello* (see below). A steamer runs regularly to (18 M.; 2 hrs.) *Grand Manan* (see below), while river-steamers ply to *St. Andrews* (see above) and up the *St. Croix* to *St. Stephen*, *Robinston*, and *Calais* (comp. *Baedeker's Canada*).

Campobello (*Tyn-y-Coed Hotel*, with its annex the *Tyn-y-Maes*, from $ 3; *The Owen*, from $ 2), a picturesque island between *Passamaquoddy Bay* and the *Bay of Fundy*, just on the Canadian (New Brunswick) side of the international boundary, is now much frequented in summer by New Yorkers, Bostonians, and others. For a detailed account of its attractions, see *Baedeker's Canada*.

Grand Manan (*Marathon Ho.*, $ 1½), another Canadian island, about 16 M. long and 3-6 M. wide, lies at the entrance to the *Bay of Fundy*. 9 M. from the American coast. It is also a frequented summer-resort, and some of its cliffs and headlands are very fine

On leaving Eastport the steamer once more heads for the E., crosses the neck of Passamaquoddy Bay, and steers through the Bay of Fundy. The coast of New Brunswick is in sight to the left all the way to St. John (3 hrs.).

60 M. (from Eastport) **St. John**, see p. 290.

41. From Portland to Montreal and Quebec.

a. Viâ the Grand Trunk Railway.

Grand Trunk Railway to (297 M.) *Montreal* in 11-12 hrs. (fare $ 7½; drawing-room car $ 1½, sleeping-berth $ 2); to (318 M.) *Quebec* in 12-15 hrs. (fares $ 8½, $ 1½, $ 2). This route forms a pleasant approach to Canada, skirting the N. margin of the White Mts. (p. 320; views to the left). From Boston to Canada by this route takes 3-4 hrs. more.

Portland, see p. 287. After leaving the main station the train stops at (2 M.) the junction with the B. & M. R. R. and then crosses (3 M.) the *Presumpscot River* (*View of *Casco Bay* to the right). At (11 M.) *Yarmouth Junction* we intersect the M. C. R. R. (comp. p. 289) and then turn to the left (N.W.). As far as (27¼ M.) *Danville Junction* the M. C. R. R. (see p. 304) runs parallel to our line (to the left). — We now again cross the M. C. R. R. and turn towards the W. 29½ M. *Lewiston Junction*, for *Auburn* and (6 M.) *Lewiston* (p. 298); 36 M. *Mechanic Falls* (p. 298); 47 M. *South Paris*, for (2½ M.) *Paris Hill* and for (1½ M.) *Norway* (trolley-line). From (62 M.) *Bryant's Pond* (700 ft.) coaches run to (15 M.) *Rumford Falls* (p. 299) and to (21 M.) *Andover* (p. 299).

We have now fairly left the level coast districts and entered the mountains. — 70 M. *Bethel* (1000 ft.; Prospect Hotel, $ 2-4), a small summer-resort, with mineral springs, pleasantly situated above the 'intervales' of the *Androscoggin*.

Coaches (fare $ 2½) run regularly from Bethel to (26 M.) *Lakeside Hotel*, at the S. end of *Lake Umbagog* (p. 299). The road leads through wild and picturesque scenery, ascending the valleys of the *Androscoggin* and *Bear River* and affording distant views of the White Mts. (p. 320).

Beyond Bethel we obtain numerous fine views of the *White Mts.* (p. 320; to the left), while the Androscoggin runs on the right. Near (86 M.) *Shelburne* (725 ft.), in *New Hampshire*, we have views of (l.) *Mt. Madison* and *Mt. Moriah* and (r.) *Mt. Hayes*.

91 M. Gorham (810 ft.; meal-station), see p. 324.

Beyond Gorham our train turns to the N.W., intersects the B. & M. R. R., and ascends along the Androscoggin, affording a good view of Mt. Adams to the left, to (98 M.) *Berlin* (Revere Ho., $ 2½; Berlin Ho., $ 2), where the river pours tumultuously through a narrow pass, descending 200 ft. within a mile. Coaches run hence to (22 M.) *Errol Dam* (Umbagog Ho., $ 2), whence steamers ascend the Androscoggin to (3 M.) *Lake Umbagog* (p. 299).

From Berlin to Whitefield, 29 M., railway in 1¼ hr. (fare $ 1.04). Comp. Map, p. 320. — This line crosses the Grand Trunk Railway at (5 M.) *Gorham* (see above) and runs to the W. along the *Moose River*. 10 M. *Randolph* (p. 325); 12 M. *Appalachia* (p. 325); 15 M. *Bowman* (p. 325); 17½ M. *Boy* (or *Bois*) *Mountain*; 19 M. *Jefferson Highlands*. From (21 M.) *Cherry Mountain* a branch runs to the right to (3 M.) *Jefferson* (p. 330). 24 M. *Jefferson Junction*; 26 M. *Hazen Junction*. — 29 M. *Whitefield* (p. 306).

The train now leaves the Androscoggin, which turns to the N. Beyond (103 M.) *Copperville* (1080 ft.; view) we follow the *Upper*

Ammonoosuc to (122 M.) *Groveton* (Melcher Ho., $ 2), the junction of the Boston & Maine R. R. (to the White Mts. and Wells Junction; see p. 318). This is the starting-point for an ascent of the *Percy Peaks* (3150 and 3335 ft.; 2½-3½ hrs.). The line now passes into the *Connecticut Valley* (to the right, the white Percy Peaks). From (134 M.) *North Stratford*, where our line intersects the Maine Central R. R. (see p. 306), coaches run to (1½ M.) *Brunswick Springs*. We now cross the Connecticut, enter *Vermont* (the 'Green Mountain State'), and run through forest. 149 M. *Island Pond* (1500 ft.; Stewart Ho., $ 2; Rail. Restaurant), with the frontier custom-house (baggage examined).

At (165 M.) *Norton Mills* we enter *Canada*. Hence, viâ (196 M.) *Sherbrooke* and (221 M.) *Richmond*, to (297 M.) *Montreal* and (318 M.) *Quebec*, see *Baedeker's Canada*.

b. Viâ the Maine Central Railroad.

Comp. Maps, pp. 232, 320.

To (286 M.) *Montreal* in 12-16 hrs. (fare $ 7½; parlor-car $ 1½, berth $ 2); to (321 M.) *Quebec* in 14½ hrs. (fares $ 8½, $ 1½, $ 2). This line traverses the centre of the White Mts. (seats to the right; observation-cars attached to the trains in the mountain-district). Through parlor and sleeping cars run from Portland to Montreal and Quebec.

Portland, see p. 287. The train starts from the Union Station, crosses the *Presumpscot* twice, and runs towards the W. 6 M. *Cumberland Mills*, with manufactures of paper. — 17 M. *Sebago Lake Station*, at the S. end of **Sebago Lake** (265 ft.; *Sebago Lake Ho.*, $ 2-3), a pleasant, islet-dotted sheet of water, 13 M. long, 10 M. wide, and 100 ft. deep in its deepest part.

Steamers ply from this point across Sebago Lake, through the corkscrew-like *Songo River* (6 M.), and across *Long Lake* (13 M. long and 2 M. wide), to (32 M.) *Harrison* (Elm Ho., Harrison Ho., $ 2; there and back in 8 hrs.; a pleasant trip). The chief intermediate stopping-place on this trip is at Naples (*Bay of Naples Inn, $ 3-4; *Lake Ho.*, $ 1½-2), charmingly situated on the so-called *Bay of Naples*, the S. basin of Long Lake. *Bridgton Landing* is the station for (1 M.) *Bridgton* (The Bridgton, $ 2½-4; Cumberland Ho., Stoneleigh, Burnell's, $ 2), another frequented resort. Bridgton is the usual starting-point for an ascent of (10 M.) **Pleasant Mt.** (2020 ft.; **Mt. Pleasant Ho.*, on the top, from $ 4½), which commands a splendid *Panorama of the White Mts. — From Harrison coaches run to (11 M.) *South Paris* (p. 303) and to (5 M.) *Waterford* (Lake Ho., $ 2), the birthplace of *C. F. Browne* ('*Artemus Ward*'; 1834-67). This district has been celebrated by Longfellow and Whittier, and Hawthorne spent his early boyhood at *Raymond*, near the head of the lake.

Beyond (25 M.) *Steep Falls* we follow the valley of the *Saco*, the falls of which are seen near (34 M.) *West Baldwin*. From (37 M.) *Bridgton Junction* a narrow-gauge line runs to (16 M.) *Bridgton*, on Long Lake (see above). — 50 M. **Fryeburg** (420 ft.; Arguenot, $ 2), a summer-resort, is 10 M. to the W. of Pleasant Mt. (see above). Daniel Webster taught in the Academy here. — We now enter *New Hampshire* (p. 284). Beyond (55 M.) *Conway Centre* we cross the Saco,

and enter the district of the *White Mountains* (R. 43). 60 M. *North Conway* (520 ft.; see p. 321), the junction of the Boston & Maine R. R. We now ascend more rapidly. To the right are Middle Mt., Hurricane Mt., and Mt. Kearsarge (pp. 322, 323); to the left, the long ridge of Moat Mt. (p. 323), with the 'Ledges'. 62½ M. *Intervale* (p. 322). The train traverses the beautiful Conway 'intervales'. From (65 M.) *Glen Station* coaches run to (3 M.) *Jackson* (see p. 323). The train turns to the left and crosses the Saco. Beyond (71 M.) *Bartlett* (Bartlett Ho., $2; Rail. Restaurant), where an 'observation-car' is added to the train, we twice cross the Sac , then turn to the N., and cross *Sawyer's River* (station) and *Nancy's Brook*. To the left rises the triple-peaked *Mt. Carrigain* (4647 ft.). 78 M. *Bemis*. To the right are *Mt. Crawford* (3100 ft.), *Mt. Resolution* (3400 ft.), and the *Giant's Stairs* (3423 ft.); to the left is *Mt. Nancy* (3810 ft.). — Th line now bens to the N.W. and enters the famous ***Crawford or White Mountain Notch**, a narrow defile, about 3-4 M. long, with the towering walls of *Mt. Willey* (4260 ft.) on the left and *Mt. Webster* (3876 ft.) on the right. The train ascends rapidly (1 : 44), at a height of 100-350 ft. above the river, and affords, perhaps, better iews than the road (comp. p. 325; best views to the right). The deep ravine below (82 M.) *Frankenstein Cliff* (stat.) is crossed by a dizzy trestle, 80 ft. high and 500 ft. long. To the right (ahead) we have a good view of Mt. Washington. The *Willey Brook* is crossed by another lofty trestle (80 ft. high). To the right are the *Silver* and *Flume Cascades* (p. 326). The train skirts the E. slope of *Mt. Willard* (2786 ft.; p. 326), leaves the Notch by its narrow *Gateway* (p. 325), and reaches the plateau on which lies the (85 M.) *Crawford House* (1900 ft.; p. 325). We now begin the descent, with the *Ammonoosuc* to the r ght. Near (89 M.) *Bretton Woods* (p. 326) we cross the Ammonoosuc and begin to descend along its right bank. — At (90 M.) *Fabyan's* (p. 327) we connect with the railway to the summit of *Mt. Washington* (see p. 331). 91 M. *White Mt. House*. Passengers for the line, viâ *Bethlehem Junction*, to *Profile House* (p. 328), *Bethlehem Street*, and *Maplewood* also change carriages here. 94 M. *Twin Mt. House* (p. 327). We skirt the shoulder of *Cherry Mt.*

100 M. *Quebec Junction*, where the Quebec (Upper Coos) Division of the Maine Central R. R. diverges to the right, connecting with the Canadian Pacific and the Quebec Central Railways.

From Quebec Junction to Quebec, 221 M., in 10 hrs. We cross the *B. & M. R. R.* at (2 M.) *Jefferson Junction* (4 M. from Jefferson, p. 330), pass *Cherry Pond*, and reach (5 M.) *Bailey's* (for *Jefferson*, p. 330), situated on a spur of *Mt. Starr King* (3915 ft.), which rises to the right. The railway skirts the *Israel River*. — 12 M. Lancaster (870 ft.; *Lancaster Ho.*, from $2½; *Rail. Restaurant*), also on the B. & M. R. R. (p. 318), pleasantly situated on the Israel River, with 3190 inhab., is a favourite summer-resort and commands distant views of the White Mts. *Mt. Prospect* (2062 ft.; Prospect Ho., $3), 2 M. to the S.E., is a good point of view. To the E. are the *Pilot Mts. Jefferson* (p. 330) is 7 M. to the E.S.E. — We now pass from the White Mt. district and enter the *Coos District*. The train

again crosses the *B. & M. R. R.* at *Coos Junction*, and farther on twice crosses the *Connecticut*, which here forms the boundary between Vermont and New Hampshire. At (33 M.) *North Stratford* our line intersects the *Grand Trunk Railway* (see p. 304). We ascend to the N. through the valley of the *Connecticut*. From (46 M.) *Colebrook* (1030 ft.; Hampshire Inn, $ 3-4; Monadnock Ho., $ 2-3) an automobile stage runs to (10 M.) the *Dixville Notch (*The Balsams*, $ 4), a fine ravine, 2 M. long, with its most striking points (Table Rock, etc.) marked by sign-posts. Coaches run from the Notch to (11 M.) *Errol Dam* (p. 303). From (53 M.) *West Stewartson* stages run to the (15 M.) *Connecticut Lakes* (2550 ft.; Metalluk Lodge, $ 2; Idlewild Camp, on the second lake, $ 1½-2), the source of the Connecticut.

At (55 M.) *Beecher's Falls* we enter Canada (luggage examined). Hence to (221 M.) *Quebec*, see *Baedeker's Canada*.

From Quebec Junction the main line descends along the Ammonoosuc to (104 M.) *Whitefield* (p. 318) and (107 M.) *Scott's*, where it crosses the B. & M. R. R. It then crosses the *Connecticut* and enters Vermont. At (110 M.) *Lunenburg* (Heights Hotel, $ 1½-2) we pass on to the St. Johnsbury & Lake Champlain R. R. Beyond (118 M.) *Miles Pond* we follow the *Passumpsic* to (133 M.) *St. Johnsbury* (p. 318), where we join the main route of the B. & M. R. R. to Canada. Thence to (286 M.) *Montreal*, see R. 42c.

42. From Boston to Montreal.

Comp. Maps, pp. 274, 232.

a. Viâ Rutland and Burlington.

330 M. Boston & Maine Railroad (Fitchburg Division) from Boston to (114 M.) *Bellows Falls* in 3¾-4 hrs.; Rutland Railroad from Bellows Falls to (186 M.) *St. John's* in 5¾-7 hrs.; Canadian Pacific Railway thence to (30 M.) *Montreal* in ¾-1 hr. (through-fare $ 9; parlor-car $ 1½, sleeper $ 2).

Boston, see p. 253. Leaving the North Union Station (p. 253), the train crosses the *Charles*, affording a view to the right of the *Bunker Hill Monument* (p. 273). At the *State Prison* (right) the line wheels to the left (W.) and passes through *Somerville* (69,272 inhab. in 1905). To the left lies *Cambridge* (p. 270), where we have a glimpse of the Harvard College buildings. — 10 M. **Waltham**, a city of (1905) 26,282 inhab., with a *State Armoury*, cotton-mills, and the works of the *Waltham Watch Co.* (producing ca. 1,000,000 machine-made watches annually). To the right is *Prospect Hill* (480 ft.). — 13 M. *Kendal Green* is the station for *Weston*, with golf-links and the country homes of many Bostonians. Farther on we pass *Walden Pond* (right), a favourite haunt of Thoreau (1817-62; see 'Walden'), but now frequented by picnic parties instead of recluses.

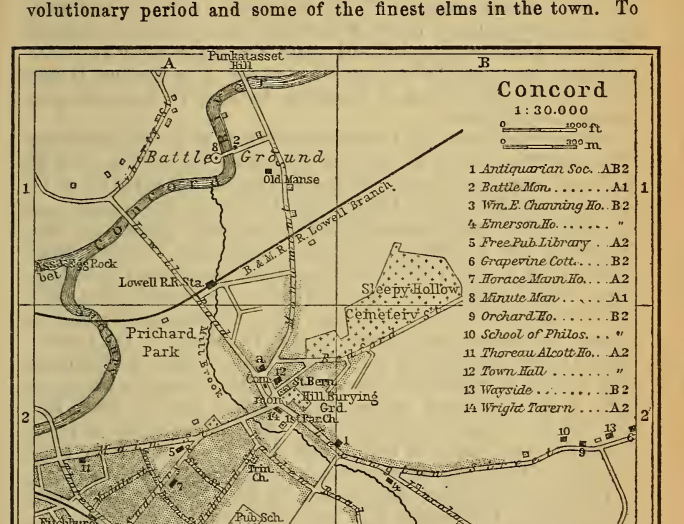
20 M. **Concord.** — The Colonial (Pl. a; A, 2), from $ 2½. — *Tea House*, opposite the post-office, with bedrooms. — A *Carriage* (fixed tariff) may be hired at the station and is often desirable in view of the scattered positions of the chief points of interest.

Concord, a village with (1905) 5421 inhab., situated on the *Concord River*, here formed by the junction of the *Sudbury* and the *Assabet*, is of abiding interest as the home of Hawthorne and Emerson, Thoreau

and the Alcotts. It may be fittingly described as the American Weimar or Stratford-on-Avon and has kept its literary association less tainted by commercialism than either of these places.

Comp. 'The Story of Concord', told by Concord Writers (1908).

On leaving the *Fitchburg Railroad Station* (Pl. A, 2) we proceed to the left along *Thoreau Street* to *Main Street*, which we follow to the right. On the left are several interesting houses of the Revolutionary period and some of the finest elms in the town. To



Wagner & Debes, Leipzig

the right, where *Sudbury Street* joins Main St., stands the *Free Public Library* (Pl. 5; A, 2), containing many interesting autographs. Following Main St., we reach the village centre and (just beyond) the Common (Pl. A, 2), whence several streets radiate. Here stands (on the right) the old *Wright Tavern* (Pl. 14), where the British officers were quartered on the morning of the Concord fight.

If we follow *Lexington Street* to the right, which was the route of the British retreat in 1775 (see p. 308), we pass (on the right) the *First Parish Church* (Pl. A, 2) and reach (2 min.; to the left) the house of the *Concord Antiquarian Society* (Pl. 1; A, B, 2), with an interesting museum (small fee). Farther on, at the point where Lincoln St. diverges, stands the white *House of R. W. Emerson* (Pl. 4; B, 2), still occupied by his daughter. Here the 'Sage of

Concord' was visited by *Fredrika Bremer*, *Margaret Fuller* (Countess d'Ossoli), etc. A little farther on, to the left, is *Orchard House* (Pl. 9; B, 2), long the home of the Alcott Family, of which *Louisa M. Alcott* (1833-88), a thor of 'Little Women', is the most widely known member. Adjacent is the building used by the *Concord School of Philosophy* (Pl. 10; B, 2), which was established by *A. Bronson Alcott* (1799-1888) in 1879 and counted Emerson, Ben. Peirce, Dr. W. T. Harris, and Col. T. W. Higginson among its lecturers. The next house (left) is *The Wayside* (Pl. 13; B, 2), the home of *Nathaniel Hawthorne* in 1852-64, with the tower-study in which he wrote 'Septimius Felton' and other works. The 'Concord Grape' originated in the garden of *Grapevine Cottage* (Pl. 6; B, 2), just beyond The Wayside.

We now return to the Common mentioned at p. 307 and follow *Monument Street* to the N., crossing the Lowell branch of the B. & M. R. R. and reaching (12 min.; to the left) the ***Old Manse** (Pl. A, 1), built for the *Rev. Wm. Emerson* in 1765 and still owned and occupied by his wife's descendants by her second husband, the *Rev. Dr. Ripley*. *R. W. Emerson*, a grandson of the Rev. Wm. Emerson, spent part of his early life here, and in the study over the dining-room wrote 'Nature'. In the same room, Hawthorne, who later occupied the house for a short time, wrote his 'Mosses from an Old elanse'. Adjoining the grounds of the Old Manse is the avenue Mading to the bridge over the Concord River, where the 'minute-men' of the neighbourhood encountered the British soldiers on April 19th, 1775, and 'where the embattled farmers stood and fired the shot heard round the world'. Beyond the bridge is a fine commemorative statue of the ******Minute Man* (Pl. 8; A, 1), by Dan. C. French. The continuation of Monument St. leads across the river to (10 min.) *Punkatasset Hill*, whence, at the highest point of the road, there is a charming view of the river and country side.

Bedford Street, running to the E. from the Common, leads to (10 min.) ***Sleepy Hollow Cemetery** (Pl. B, 1, 2), one of the most romantic burial-grounds in America. Among the illustrious dead buried here are *Ralph Waldo Emerson* (1803-82; grave marked by a huge block of pink quartz), *Nathaniel Hawthorne* (1804-64; grave surrounded by a low hedge of arbor vitæ), *Henry Thoreau* (comp. p. 306), and the *Alcotts* (see above). The *Melvin Monument* is by D. C. French (1908). — *Hill Burying Ground* (Pl. A, 2), in Lexington St., facing the Common, and another old burying-ground in Main St. near the village centre, contain some curious gravestones of the early settlers and several quaint inscriptions (such as that of the negro, John Jack, in the former). The Concord rivers are very picturesque, and a canoe trip on one of them may fitly wind up the visit.

A line runs from Concord to (10 M.) **Lexington** (*Russell Ho.*, $ 2-3; also reached direct from Boston by the Boston & Maine R. R., 11 M., or by electric car), where the first battle between the British and Americans took place (April 19th, 1775; comp. above). Pop. (1905) 4530. In or near

the *Common* or *Green*, where the battle took place, in the centre of the town, are two monuments and various commemorative tablets and boulders. On the N. side of the Green is the old *Buckman Tavern*, where the minute-men assembled (tablet), and on the W. side is the *Harrington House*, where the wounded Jonathan Harrington dragged himself to die at his wife's feet. In Hancock St., leading to the N.W. from the Green, stands (right) the *Hancock-Clarke House*, where John Hancock and Samuel Adams were roused by Paul Revere in the middle of the night before the battle. It contains a few relics of the period, but there is a larger and more interesting collection in the *Town Hall*, on the road to Boston, to the E. of the Green. *Munroe's Tavern*, farther to the S.E., near *East Lexington*, was the headquarters of Earl Percy, the British commander.

At (22 M.) *Concord Junction* we cross the N. Y. N. H. & H. line to Lowell (p. 312); to the right is the *State Reformatory*. — From (36 M.) *Ayer Junction* various lines radiate.

One of these branches runs to (24 M.) *Greenville*, passing (3 M.) *Groton*, with one of the leading private schools for boys in the United States. — Another, running S. to (11 M.) *Clinton*, passes (9 M.) *South Lancaster*, with the *Thayer Ornithological Museum (8-12 & 1-4).

50 M. **Fitchburg** (*Johnsonia*, from $ 3; *Fitchburg Ho.*, $ 2-2½), a busy industrial city on the *Nashua River*, with (1905) 33,021 inhab., the junction of lines to Worcester (p. 240) and South Framingham (p. 241). In the centre of the town are a large *Soldiers' Monument* and the *Walker Free Library*, with its art-collections. The *Calvinistic Congregational Church* contains some fine stained-glass windows, by Fred. Wilson and Tiffany (1903).

The train now begins to ascend. To the right runs the *Nashua*. From (53 M.) *Wachusett* coaches run to the S. to (6 M.) **Mt. Wachusett** (2108 ft.; *Summit Ho.*, $ 2-2½; *View), which may also be reached from *Princeton* (Princeton Inn, $ 2½-3; Wachusett Ho., $ 2-3), on the Worcester line (see p. 335). At (60 M.) *South Ashburnham* the Cheshire branch diverges to the right (N.) from the main line (which goes on to the Berkshire Hills and Troy, N. Y.; see p. 335). — At (68 M.) *Winchendon* diverges the Monadnock branch to *Rindge*, *Jaffrey* (The Inn, $ 2-2½; *The Ark, $ 2-2½), and (10 M.) *Peterboro* (Tucker's Tavern, $ 2-2½).

From Peterboro a stage (75 c.) runs to (6 M.) the lovely summer-resort of Dublin (*Leffingwell Inn*, $ 3), situated on a beautiful lake near the N.W. base of Mt. Monadnock. It is also reached viâ *Harrisville*, on the Boston & Maine R. R. (p 313).

The train now enters *New Hampshire*. 77 M. *Fitzwilliam* (1200 ft.; *Fitzwilliam Tavern, $ 2; Laurel Lake Inn), one of the starting-points for an ascent of (5 M.) Mt. Monadnock. 82 M. *Troy*, the usual station (carriage, $ 1 each) for (5 M.) the *Mountain House* (2100 ft; $ 2½), about halfway up **Mt. Monadnock** (3186 ft.; *View). — 92 M. *Keene* (Cheshire Ho., $ 2½-3), a beautiful little city on the *Ashuelot*, with 9165 inhab., the attractive Horatian Park (1060 ft.), a country club (golf), and manufactures of artistic pottery, wooden ware, and furniture. — Beyond (104 M.) *Westmoreland* the train begins to descend into the valley of the *Connecticut*. 110 M. *Walpole* (Walpole Inn, with swimming pool, $ 3-4; Wentworth, $ 2), a charming summer-resort. We now cross the river to —

114 M. **Bellows Falls** (280 ft.; *Windham, Rockingham,* $2-2½; *Rail. Restaurant*), in *Vermont*, a picturesque summer-resort, with large pulp and paper mills. The wooded *Mt. Kilburn*, on the New Hampshire bank, affords a fine view of the village and the rapids (fall of 40 ft.). At Bellows Falls we intersect the *Connecticut River Division of the B. & M. R. R.* (see p. 345) and pass on to the tracks of the *Rutland R. R.*, which crosses the **Green Mts.** (comp. p. 314), affording beautiful views.

At first we now traverse the pretty valley of the *Williams River*, passing (128 M.) *Chester* (570 ft.) and other small summer-resorts. We then pass into the attractive valley of the *Black River* and soon begin to ascend the E. slope of the *Green Mts.* (comp. p. 314). Near (137 M.) *Cavendish* (910 ft.; Elliot, $2) is the wild ravine of the Black River, with interesting pot-holes (6 inches to 10 ft. in diameter). 144 M. *Ludlow* (1080 ft.; Goddard, Ludlow, $2; Echo Lake Ho., 5 M. from the station, $1½) is an attractive summer-resort. — From (148 M.) *Summit* (1525 ft.) we descend rapidly to —

167 M. **Rutland** (560 ft.; *Berwick Ho.*, $2½-4; *Bardwell Ho.*, $2½), a town in the *Otter* valley, with 11,499 inhab., chiefly engaged in quarrying and cutting marble (see below), and in the Howe Scale Works. It is the junction of the branch to *White Creek* (for Albany) and *Chatham* and of the *D. & H. R. R.* (to Saratoga, etc.).

Excursions may be made from Rutland to (10 M.) *Killington Peak* (4240 ft.; Hotel near the top, $2½; *View), one of the highest of the Green Mts.; to *Mt. Ida*, etc. — Vermont produces three-fourths of the marble quarried in the United States, and Rutland is the centre of the industry, which employs many thousand men. The *Sutherland Falls Quarry*, at *Proctor* (see below), is probably the largest single quarry in the world. The marble of Vermont is said to be whiter and more durable than that of Carrara.

172 M. *Proctor* (see above). — At (176 M.) *Pittsford* (350 ft.) is the *Vermont Tuberculosis Sanatorium.* In a gorge near by is a curious ice-cave, where thick ice is found at midsummer (guide necessary). — 183 M. *Brandon* (300 ft.; Brandon Inn, $2½), with marble quarries, rich deposits of bog-iron, and mines of kaoline, used here in making mineral paint. Stages run hence to (8 M.) the pretty *Lake Dunmore* (Lake Dunmore Ho., Mountain Spring Hotel, $3-4), surrounded by mountains, near which is the equally attractive *Silver Lake* (hotel). Another favourite drive is to *Sudbury* (Hyde Park Manor, $3-5), 8 M. to the W. — From (189 M.) *Leicester Junction* (350 ft.) a branch-line runs to (17 M.) *Ticonderoga* (p. 124). — 200 M. *Middlebury* (340 ft.; Addison Ho., $2-3), with a college, is a good centre for excursions to (11 M.) **Bread Loaf Inn* (1525 ft.; $3-4), *Snake Mt.* (1310 ft.; *View), and other points among the Green Mts. *Mt. Lincoln* (4100 ft.) and *Bread Loaf* (3900 ft.), both commanding fine views, are easily ascended from the Bread Loaf Inn. — We descend along the *Otter Creek* to (208 M.) *New Haven Junction* (for a short line to *Bristol*)

and (213 M.) *Vergennes* (190 ft.; Lenox, Stevens Ho., $2½-3), 8 M. from Lake Champlain, of which we obtain views, backed by the Adirondacks (R. 8), to the left. 227 M. *Shelburne*, with the house, grounds, and model farms of Dr. W. Seward Webb (to the left, on the lake).

234 M. **Burlington** (110 ft.; *Van Ness Ho.*, from $3; *Burlington*, $2-3), beautifully situated on a hill rising from the E. shore of *Lake Champlain* (p. 126), is the chief city of Vermont and one of the largest lumber-marts in America, the lumber coming chiefly from Canada. Pop. (1900) 18,640. Near the public square in the centre of the town, which is well built and laid out, are the *Post Office*, the *City Hall*, the *Court House*, and the *Young Men's Christian Association*. The *Masonic Temple*, at the corner of Church and Pearl Sts., and the *Fletcher-Carnegie Free Library* (College St.) are also noteworthy. The *Roman Catholic Cathedral* and *St. Paul's Episcopal Church* are conspicuous among the churches.

The University of Vermont, on a hill 365 ft. above the lake, is attended by 535 students. The handsome *Billings Library*, designed by H. H. Richardson, contains the fine Marsh Collection of books in the Scandinavian languages (comp. p. 314). The University Tower commands a magnificent *View (best at sunset) of the city, Lake Champlain (with *Juniper Island* opposite Burlington), the Adirondacks (incl. Mt. Marcy and Whiteface), and the Green Mts. (to the E.; Mt. Mansfield, Camel's Hump, etc.). In the University Park is a *Statue of Lafayette*, by J. Q. A. Ward.

Col. Ethan Allen (see p. 125; monument) is buried in *Green Mt. Cemetery; Lake View Cemetery*, to the N.W., is also worth visiting.

Walks and drives may be taken along the *Winooski*, to *Red Rocks*, to *Shelburne Point*, *Mallett's Bay* (6 M.), etc., and longer excursions to *Mt. Mansfield* (p. 315), *Camel's Hump* (p. 315), and other Green Mt. peaks. Steamers on Lake Champlain to *Port Kent* (Ausable Chasm), *Plattsburg*, etc., see R. 10.

From Burlington to Essex Junction, 8 M., *Central Vermont Railway* in 25 min. (fare 25 c.). The line runs to the N.E., passing the picturesque gorge and falls of the *Winooski*, and at (8 M.) *Essex Junction* (p. 315) joins the trunk line of the Central Vermont Railway (see R. 42b).

To the N. of Burlington, the line becomes unusually interesting, crossing as it does the beautiful islands in Lake Champlain. For about 6 M. it skirts Lake Champlain, affording fine views, including Plattsburg (p. 128), across the water, 10 M. away, and the Hotel Champlain (p. 126). It then leaves the mainland and crosses to the island of **South Hero** (p. 126), over a stone embankment, 3½ M. long, and just wide enough for the single track, giving the impression that the train is gliding over the surface of the water. — 247 M. *South Hero* (Iodine Springs Ho., $2-3), a small watering-place. Few buildings are visible. About 3 M. off is the *Lewis Camp* ($2-5). — 251 M. *Grand Isle* (Island Villa, 2½ M. from the station, $2½-3), also on South Hero, in the midst of a camping and fishing region. — The railway now leaves South Hero and runs across another causeway (¾ M. long) to **North Hero Island** (p. 126).

259 M. *North Hero* (Irving Ho., $ 2). — Beyond this point the railway returns by a third embankment to the mainland, which it reaches at the peninsula named *Alburgh Tongue.* — 265 M. *Isle La Motte* is the station for the island of that name, one of the loveliest of the Champlain group, and is connected with it by an old bridge. It has numerous picturesque camps along its shore, and the Church and Shrine of St. Anne attract many pilgrims and visitors. — From this point the line runs due N., skirting the lake shore, to (271 M.) *Alburgh* (Lakeside, $ 2), where hand-baggage is examined by the Canadian custom-house officers.

From Alburgh to Ogdensburg, 122 M. railway in 4½-5 hrs. — At (4 M.) *Rouse's Point* (p. 128) we intersect the Central Vermont Railway. — 9 M. *Champlain*, one of the oldest villages in New York State. — At (14 M.) *Mooers Junction* our line is crossed by the Delaware and Hudson R. R. — 40 M. *Chateaugay* (p. 106), one of the gateways to the Adirondacks. — 60 M. **Malone Junction**, at the intersection of the Adirondack and St. Lawrence Division of the N. Y. Central and Hudson River R. R. A mile farther on is *Malone* (p. 118). — 75 M. **Moira** (p. 118), where the N. Y. and Ottawa R.R. crosses our line. — 81 M. *Lawrence*, the centre of one of the largest dairy districts of New York State. — 97 M. *Norwood* (p. 132), the junction of the Rome, Watertown, and Ogdensburg Division of the N. Y. C. R. R. — 122 M. **Ogdensburg**, see p. 154.

Beyond Alburgh the railway soon enters Canada, running to the N. along the E. bank of the *Richelieu* (p. 128). 277 M. *Noyan* is the junction of the Canada & Atlantic Railway to Ottawa (see *Baedeker's Canada*). 281. M. *Clarenceville.* At (299 M.) *Iberville*, the junction of a line to Quebec, we cross the Richelieu to (300 M.) *St. John's*, where we join the Canadian Pacific Railway. Hence to —

330 M. *Montreal* (Windsor Street Station), see *Baedeker's Canada.*

b. Via Lowell and Concord.

335 M. Boston & Maine Railroad *(Concord Division)* to (145 M.) *White River Junction* in 4¼-4¾ hrs.; Central Vermont Railroad thence to (163 M.) *St. John's* in 5-6 hrs.; and Grand Trunk Railway thence to (27 M.) *Montreal* in ¾-1 hr. (through-fare $ 9; parlor-car $ 1½, sleeper $ 2).

Boston, see p. 253. The train starts from the *North Union Station* (p. 253), crosses the *Charles* and the Fitchburg division (p. 306), and runs to the N.W. through *Somerville* and *Medford.* At the latter is *Tufts College*, with 1120 students (including the Medical and Dental Schools in Boston) and the interesting Barnum Museum of Natural History (with the stuffed skin of the elephant 'Jumbo'). To the right lie the **Middlesex Fells* (p. 285), to the left the *Mystic Lakes.* 8 M. *Winchester*, with a State Aviary. 10 M. *Woburn*, an industrial town with (1905) 14.402 inhab., a fine public library (by H. H. Richardson), and the residences of many Bostonians, was the birthplace of Count Rumford (1753-1814). — At (15 M.) *Wilmington* the branch to Lawrence (p. 286) diverges to the right. Beyond (22 M.) *North Billerica* we cross the *Concord River.*

26 M. Lowell (*St. Charles*, $ 3; *Richardson's*, $ 3; *American Ho.*, from $ 2), at the confluence of the *Concord* and *Merrimac*, is the

fourth city of Massachusetts (pop. 94,889 in 1905) and one of the most important industrial cities in the United States. In 1905 its huge mills and factories, run mainly by the water-power furnished by the Pawtucket Falls on the Merrimac (32 ft.; seen from the bridge), produced goods (woollen cloth, carpeting, etc.) to the value of $46,879,212 (9,375,842*l.*). Dickens gives a graphic description of Lowell in his 'American Notes' (chap. 4), but many of its features have changed since his day, and the mill operatives are now mainly French Canadians (25,000) or Greeks (7000), while about 20 other races are represented. The Greek cafés are characteristic, and the Greek church of *Hagia Trias* (cor. of Lewis and Jefferson Sts.) is an imposing example of the Byzantine style. The centre of the city is Monument Square, with the *City Hall*, *Memorial Hall*, *a War Monument*, and a *Statue of Victory* after Rauch. In Worthen St. (No. 243) is the house in which *James McNeill Whistler* (1834-1903) was born (now occupied by the Lowell Art Association and containing some relics of the painter). A replica of *Rodin's* Whistler Memorial has also been erected here.

Beyond Lowell the line follows the Merrimac (seats to the right), and beyond (33 M.) *Tyngsboro* (*View) it enters *New Hampshire*. — 39 M. **Nashua** *(Tremont, Laton Ho.*, from $2; *Rail. Restaurant)*, a pleasant town of 23,898 inhab., at the confluence of the Merrimac and the *Nashua*, with manufactures of iron, cotton, carpets, etc. The fine Roman Catholic church of *St. Francis Xavier*, was erected in 1898.

From Nashua to Keene, 56 M., railway in 2-2¹/₃ hrs. (fare $1.65). Stages run from (9 M.) *Amherst* or *Ponemah* (birthplace of Horace Greeley, p. 39) to *Ponemah Springs* (hotel) and from (12 M.) *Milford* to *Mount Vernon*, a summer-resort on the *Quohquinapassakessamanagnog River*. 16 M. *Wilton*; 27 M. *Greenfield*. At (32 M.) *Elmwood Junction* we cross a branch from Peterboro (p. 309) to Contoocook and Concord (see below). — 35 M. *Hancock*, named after John Hancock, first signer of the Declaration of Independence, one of the early owners. — Coaches run from (43 M.) *Harrisville* to (4 M.) Dublin (p. 309). — 56 M. *Keene*, see p. 309.

The train now runs to the N. through the pretty valley of the Merrimac. — 56 M. **Manchester** *(New Manchester Ho.*, $2¹/₂-3¹/₂; *Rail. Restaurant)*, the largest city in New Hampshire (56,987 inhab.), with manufactures of cotton goods and prints (value in 1900, $26,000,000). Its water-power is furnished by the *Amoskeag Falls*, on the Merrimac. Good view of mills to the left.

About 4 M. to the E. of Manchester lies the island-studded *Lake Massabesec* (fishing), 4 M. long and 30 M. in circumference.

From Manchester to Henniker, 26 M., railway in 1¹/₄ hr. (fare 74 c.). From (16 M.) *Parker*, on this railway, a short branch-line runs to (6 M.) *New Boston* (The Tavern), a favourite resort for driving and sleighing parties from Lowell, Manchester, Nashua, and Concord, and also frequented by more permanent guests. At (26 M.) *Henniker* we join the above-mentioned line from Elmwood Junction to Contoocook.

At (65 M.) *Hooksett* and other points we cross and recross the Merrimac. To the W. is *Pinnacle Mt.* (view).

74 M. **Concord** (250 ft.; *Eagle*, $2¹/₂-4¹/₂; *Rail. Restaurant*), the capital of New Hampshire, with 19,632 inhab., is a pleasant

tree-shaded city on the W. bank of the Merrimac, with carriage-works and quarries of fine granite. Among the chief buildings are the *State Capitol*, the *State Library*, the *City Hall*, and the *Insane Asylum*. Count Rumford (p. 312) lived here for some years. About 2 M. to the W. is *St. Paul's*, a large and well-known boys' school.

From Concord to Claremont Junction, 57 M., railway in 2-2½ hrs. (fare $1.70). — 12 M. *Contoocook*, see p. 313. — From (28 M.) *Bradford* coaches run to (5 M.) *Bradford Mineral Springs* (Bradford Spring Ho., from $2). — 35 M. *Lake Sunapee Station* lies at the S. end of Lake Sunapee (1100 ft.), a pretty, hill-girt sheet of water, 9 M. long and 1-3 M. wide, on which small steamers ply. The chief resort on the lake is *Soo-Nipi Park*, on the E. bank, with the large **Soo-Nipi Park Lodge* (from $5) and a U. S. Fish Hatchery on *Pike Brook*. Other favourite points are the *Granliden Hotel* (from $3) and *Sunapee* (Ben Mere Inn, $4), both on the W. bank. Landlocked salmon, trout, and other fish abound in the lake. — About 6 M. from (43 M.) *Newport* is the *Blue Mountain Forest Park*, a huge game preserve formed by the late Mr. Austin Corbin, covering 25,000 acres and enclosed by a wire fence 24 M. long. Its denizens include buffaloes (170 head), elks, moose, and wild boars (from Germany). Visitors are allowed to drive through the park. — 55 M. *Claremont* (Claremont, $2½-3½). — 57 M. *Claremont Junction* (see p. 345).

At Concord our present route diverges to the left from the main line, which runs viâ *Lake Winnipesaukee* and *Plymouth* to *Wells River* (see p. 317). As we cross the *Contoocook*, near (81 M.) *Penacook*, we see on *Duston's Island*, to the right, a colossal *Statue of Mrs. Hannah Duston* of Haverhill (p. 286), who here killed 10 or 12 of her Indian captors and made her escape. — *Daniel Webster* (1782-1852) was born 2 M. to the S.W. of (93 M.) *Franklin*. From this station a branch-line runs to (13 M.) *Bristol*, whence stages ply to (5 M.) *Newfound Lake* (600 ft.). — Our line bends to the left (W.), soon passing *Webster Lake* (right) and *Highland Lake*. From (105 M.) *Potter Place* we may ascend *Mt. Kearsarge* (2943 ft.; not to be confounded with Mt. Kearsarge in the White Mts., p. 322), which commands an admirable view (road for 4 M., then short bridle-path). Beyond (126 M.) *Canaan* (955 ft.; Lucerne, $2) lies (l.) *Mascoma Lake*, with a Shaker village on its S. bank. Beyond (139 M.) *West Lebanon* we cross the *Connecticut* and reach —

145 M. **White River Junction** (365 ft.; *Junction Ho.*, $2-2½; *Rail. Restaurant*), where we cross the Passumpsic Division of the Boston & Maine R. R. and join the Central Vermont R. R.

From White River Junction to *New York* and to *Quebec*, see p. 345. — A branch-line, crossing (10 M.) *Queechy Gulf*, a narrow gorge 100 ft. deep, runs to (14 M.) Woodstock (**Woodstock Inn*, open all the year round, $3-5), the birthplace of *Hiram Powers* (1805-73), the sculptor, and *Geo. P. Marsh* (1801-82), the diplomatist and Norse scholar (comp. p. 311). It is a favourite resort in autumn (fine drives, etc.) and is also visited in winter.

Our line ascends through the picturesque **Valley of the White River*, which flows down through the *Green Mts.* Beyond (153 M.) *West Hartford* we cross the river (*View). 158 M. *Sharon* (500 ft.), the birthplace of *Joseph Smith* (p. 500), founder of Mormonism. At (177 M.) *Randolph* (680 ft.; Randolph Inn, $2) the scenery becomes wilder and the higher summits of the Green Mts. come

into sight. At (192 M.) *Roxbury* (1015 ft.) we cross the watershed and begin the descent to Lake Champlain. On a hill to the right, at (199 M.) *Northfield*, is *Norwich University*, a military college.

209 M. *Montpelier Junction*, whence a short branch-line runs to (3 M.) **Montpelier** (520 ft.; *Pavilion*, from $2½), the capital of Vermont, on the *Winooski*, with 6500 inhab. and a handsome *State House*, surmounted by a dome 124 ft. high. In the portico is a *Statue of Ethan Allen* (1737-89; p. 125). In the building of the Y. M. C. A. is the *Montpelier Art Gallery*, chiefly consisting of paintings (original and copied) by Thomas W. Wood. The *State Library* is a tasteful building. — Near (214 M.) *Middlesex* (535 ft.) the Winooski passes through the *Middlesex Narrows*, a rocky gorge ¼ M. long, 60 ft. deep, and 30 ft. wide. — 219 M. *Waterbury* (430 ft.; Waterbury Ho., $2) is a good centre for excursions.

An electric railway runs from Waterbury to the N. to (10 M.) Stowe (Green Mt. Inn, $2), a favourite summer-resort amid the Green Mts. **Mt. Mansfield** (4364 ft.; Summit Ho., $2), the highest of the Green Mts., is ascended hence by a good road (9 M.; stage) and affords a splendid *View. It has three peaks, the *Forehead*, *Nose*, and *Chin*, of which the last is the highest. The road ends at the base of the Nose (Summit Ho. $2-3), whence a path ascends to the Chin (¾-1 hr.). The view from the Nose is, however, almost as good, including the White Mts., Lake Champlain, and the distant Adirondacks. Mt. Mansfield may also be ascended by a road on the N. side, leading from *Jeffersonville* through the *Smuggler's Notch*, or on the W. side from *Underhill* (see below). — Excursions may also be made from Stowe to *Moss Glen Falls*, *Camel's Hump* (see below), etc.

Camel's Hump (4090 ft.) is now seen to the S.W. (left) and may be reached from (223 M.) *North Duxbury* (road 3 M., path 3 M.). To the N. (right) we see the *Bolton Falls*. Beyond (237 M.) *Williston* we enjoy a retrospect of Mt. Mansfield and Camel's Hump. From (241 M.) *Essex Junction* (Railway Restaurant) branch-lines run to (8 M.) *Burlington* (see p. 311) and to (11 M.) *Underhill* (see above) and (25 M.) *Cambridge Junction*.

266 M. **St. Albans** (400 ft.; *American Ho.*, $2-3; *Rail. Restaurant*), a village with 6239 inhab., finely situated on rising ground, 2½ M. from Lake Champlain. It contains the car-shops of the Central Vermont R. R. and is an important market for butter and cheese.

Aldis Hill (500 ft.), ¾ M. to the N.E. of St. Albans, and *Bellevue Hill* (1300 ft.), 2 M. to the S.E., command *Views of the Green Mts., Adirondacks, and Lake Champlain (afternoon-light best). — *St. Albans Bay* (Lake View Ho., St. Albans Point Ho., $2) affords good bass and pike fishing.

From St. Albans to Richford, 28 M., railway in 1¼-2¼ hrs., along the *Missisquoi River*. — 10 M. **Sheldon Springs** (*Riverside*, $2; *Portland*, 1½ M. from Sheldon station, $1½), with alkaline and mineral springs used for cutaneous diseases, dyspepsia, and liver complaints. The Missisquoi forms rapids here. — 28 M. *Richford* (American Ho., $2), see p. 319.

From (272 M.) *Swanton Junction* a branch-line runs to (20 M.) *Alburgh* and (24 M.) *Rouse's Point* (see p. 312). 278 M. *Highgate Springs* (Franklin Ho., $2½-3), near Missisquoi Bay (muskalonge, black bass, pickerel; duck-shooting), with alkaline springs. A little farther on the train passes into *Canada* (Province of Quebec). Beyond (290 M.) *Stanbridge* we see the *Rougemont* and *Beloeil* to the right

rising in isolation from a flat plain. Crossing the *Richelieu* at (308 M.) *St. John's*, we join the Grand Trunk Railway. Hence to —

335 M. *Montreal* (Bonaventure Station), see *Baedeker's Canada.*

c. Viâ Concord, Plymouth, Wells River, and Newport.

343 M. Boston & Maine Railroad to (235 M.) *Newport* in 7½-8 hrs.; Canadian Pacific Railway thence to (108 M.) *Montreal* in 3½-4½ hrs. (fares as at p. 312). — This route runs viâ *Lake Winnipesaukee* and also forms one of the approaches to the *White Mts.* (p. 320; views to the right).

From Boston to (74 M.) *Concord*, see R. 42b. Our present line crosses the *Merrimac* and runs towards the N. About 4 M. from (84 M.) *Canterbury* is a large Shaker village. To the left rises *Mt. Kearsarge* (p. 314). On the hill above (93 M.) *Tilton* is a *Memorial Arch* (55 ft. high), erected in honour of the Tilton family (to the right, beyond the station). We now leave the Merrimac, cross and recross the *Winnipesaukee River*, and skirt *Lake Winnisquam* (left). Ahead (left) rise the *Sandwich Mts.* and the *Franconia Mts.* (p. 328). 102 M. *Laconia* (Eagle, $ 2-2½). — 104 M. *Lakeport* (Mt. Belknap Ho., $ 2), at the extremity of *Long Bay*, an inlet of Lake Winnipesaukee, is the junction of a branch-line to (17 M.) *Alton Bay* (see below), at the S. end of Lake Winnipesaukee.

*Lake Winnipesaukee or Winnipiseogee (470 ft.; 'Smile of the Great Spirit' or 'Beautiful Water in a High Place'), the largest lake in New Hampshire, is an irregularly shaped sheet of water, 25 M. long and 1-7 M. wide, surrounded by picturesque hills and dotted with innumerable islands. Its waters (10-300 ft. deep) are singularly clear and are well stocked with fish. Small steamers traverse the lake, which is generally reached either at *Alton Bay*, *Weirs*, or *Wolfeborough* (see below).

Alton Bay (*Oakbirch Inn*, from $ 2½; *Winnipesaukee House*, $ 2-2½) lies at the end of the narrow fjord, 5 M. long, forming the S. extremity of the lake. Among the excursions made from this point is the ascent of *Belknap Mt.* (2260 ft.; *View; afternoon-light best), 12 M. to the N.W. (carriage-fare there and back $ 1½). Nearer points of view are *Mt Major*, *Prospect Hill*, and *Sheep Mt.* *Merry Meeting Lake* lies 3 M. to the E. Besides the above-mentioned route, Alton Bay is reached viâ Lawrence and Dover (see p. 286).

From Alton Bay a small steamer plies to (9 M.) Wolfeborough (*Hobbs Is Inn*, $ 2-3; *Sheridan*, $ 2; many boarding-houses), the largest village on the lake (2390 inhab.), pleasantly situated on the E. bank. The favourite excursion is to *Copple Crown Mt.* (2100 ft.), 6½ M. to the S.E. (carriage, $ 1½ each), the *View from which includes Mts. Ossipee and Chocorua to the N. (with Mt. Washington in the distance on a clear day) and extends to the ocean on the S.E. *Tumble Down Dick*, to the N. of Copple Crown, also affords a good view. Wolfeborough may also be reached viâ Salem, Portsmouth, and Sanbornville (see p. 319).

From Wolfeborough steamers run across the lake to (14 M.) *Weirs* (comp. below; 80c.) and up the lake to (17 M.) *Centre Harbor* (80 c.), both routes affording beautiful views, including Mt. Washington.

Weirs (**New Weirs*, *Lakeside*, *Winnecoette*, from $ 2), on the W. side of the lake, is a popular summer camping-ground of various ecclesiastical and other bodies. It is a station on the B. & M. R. R. (p. 317), and steamers run to *Lakeport* (see above).

Centre Harbor (600 ft.; *Colonial*, from $ 2½; *Moulton*, $ 2½; boarding-houses), at the N.W. extremity of the lake, is, perhaps, the pleasantest point to sojourn. About 4 M. to the N.E. (carr. to the foot, path to the

top 1½ M.) rises *Red Hill* (2038 ft.), commanding a splendid *View, with the Sandwich Mts. (Chocorua, etc.) to the N. and N.E. To the W. of Red Hill, about 3 M. from Centre Harbor, lies *Squam Lake, a smaller edition of Lake Winnipesaukee (Asquam Ho., at Holderness, $ 3-5). *Centre Harbor Hill* (1 M.) is a good point of view. Drives may be taken '*Round the Ring*', to *Ossipee Park*, to *Plymouth* (see below), etc. — Coaches run from Centre Harbor to (18 M.) *West Ossipee* (p. 319), whence *Mt. Chocórua (3508 ft.; *View; Chocorua Hotel, $ 2½), one of the most finely shaped mountains in New England, may be ascended via *Tamworth*.

From Lakeport (p. 316) the train runs to the N. along the bays on the W. side of Lake Winnipesaukee. 109 M. *Weirs* (p. 316); 112 M. *Meredith*, 5 M. from *Centre Harbor* (p. 316). To the right is *Lake Waukewan* or *Measley Pond*, separated by a narrow neck from the N.W. bay of Lake Winnipesaukee. We now turn away from Lake Winnipesaukee. 121 M. *Ashland*. At (123 M.) *Bridgewater* we cross the *Pemigewasset* (g soft; 'place of crooked pines').

126 M. **Plymouth** (*Pemigewasset Ho.*, $ 3-4, meal-station), in the beautiful valley of the Pemigewasset, 7 M. to the W. of Squam Lake (see above). A good view is obtained from *Walker's Hill*, close to the village; and ***Mt. Prospect** (2070 ft.), 4 M. to the N.E., commands a splendid panorama of the Franconia Mts. (N.), Sandwich Mts., and Lake Winnipesaukee. Plymouth is known for its buckskin gloves, and contains the old court-house where Daniel Webster made his first plea. Nathaniel Hawthorne died at the Pemigewasset House in 1864.

From Plymouth to Lincoln, 22 M., railway in 1 hr. This line ascends the *Valley of the Pemigewasset and leads to the heart of the *Franconia Mts.* (see p. 328). Fine views. — From (8 M.) *Campton Village* a stage runs to (12 M.) *Waterville* (Elliot's Hotel, $ 2½), situated in a high valley and an excellent centre for climbers. — 21 M. North Woodstock (**Deer Park Hotel*, $ 3½; *Fair View*, from $ 2) is finely situated at the S. end of the **Franconia Notch*, 10 M. from the *Profile House* (see p. 328; stage). Among the adjacent points of interest are the picturesque **Lost River*, *Mirror Lake*, *Bell's Cascades*, and the *Mummies* (specimens of erosion). — 22 M. *Lincoln*.

Our train now ascends the valley of the *Baker River*. Small stations. 145 M. *Warren* (Moosilauke Ho., $ 2) is the starting-point of the stage to the (10 M.) top of ***Mt. Moosilauke** ('bald place'; 4810 ft.), which has been conspicuous to the right for some time (*Tip-Top Ho.*, at the top, $ 3; *The Moosilauke*, at the base, $ 3). Fine *View of the White Mts., the Franconia Mts., and the Connecticut Valley. — Near (150 M.) *Warren Summit* (1060 ft.), the highest point on the line (path to the top of Mt. Moosilauke, 5 M.), we pass through a deep rock-cutting. At (168 M.) *Woodsville*, at the mouth of the *Ammonoosuc* (p. 325), we cross the *Connecticut* to —

169 M. **Wells River** (*Hale's Tavern*, $ 2-4; *Rail. Restaurant*), where our line joins the Connecticut & Passumpsic Division of the Boston and Maine Railroad. Wells River is also the junction of lines to the *White Mts.* and *Montpelier* (see p. 318).

From Wells River to Groveton, 53 M., railway in 2½-3 hrs. (fare $ 1.89). This line runs into the heart of the White Mts. (see R. 43) and forms part of one of the regular through-routes from New York and Boston (comp. p. 320). The White Mt. expresses from the latter city do not cross the

river at Wells River. — The train ascends along the *Ammonoosuc.* 5 M. *Bath;* 10 M. *Lisbon* (Breezy Hill Ho., $2^1/_2$-$3^1/_2$); 12 M. *Sugar Hill* (village, 6 M. from station, see p. 330); 21 M. *Littleton* (Thayer's, The Maples, Chiswick Inn, $ 2-3), a pleasant resort, from which stages run to (6 M.) *Franconia* (p. 330). — 27 M. *Wing Road* is the junction of the line to (4 M.) *Bethlehem Junction,* (8 M.) *Twin Mt. House,* (12 M.) *White Mt. House,* and (13 M.) *Fabyan's* (comp. p. 305). [From Bethlehem Junction branch-lines run to (2 M.) *Maplewood* and (3 M.) *Bethlehem,* and to (10 M.) the *Profile House;* see pp. 327, 328.] — 31 M. Whitefield (955 ft.; *Mountain View Ho.*, $2^1/_2$ M. from the station, from $3^1/_2$; *Overlook Ho.*, $2^1/_2$; *Fiske, Lindsay,* in the town, $2-3), the junction of a line to Jefferson, Gorham, and Berlin (see p. 303), affords pleasant summer-quarters (good mountain-views). The *Borden Condensed Milk Factory* is interesting. The *Morison Hospital* is specially equipped for surgical cases (from $2 a day). Drives may be taken to (2 M.) *Kimball Hill* (Overlook Ho., $2-3), *Dalton Mt.* (5 M.), *Cherry Mt.* (6 M.), *Bray Hill* (6 M.; *View of White and Green Mts.), and (7 M.) *Prospect Mt.* (*View similar, with addition of Connecticut River). — 43 M. *Lancaster* (p. 305). — 53 M. *Groveton,* see p. 304.

From Wells River to Montpelier, 38 M., railway in $1^1/_4$-$2^1/_4$ hrs. — This line ascends along the *Wells River.* There is a pretty little fall to the right, just short of (6 M.) *South Ryegate.* Beyond (10 M.) *Groton* we pass Groton Pond (r.), the source of Wells River. — 23 M. *Marshfield* (1140 ft.). — 38 M. *Montpelier,* see p. 315.

Beyond (181 M.) *Barnet* we leave the valley of the Connecticut, which bends to the N.E., and ascend along the *Passumpsic,* which we cross 25 times in 24 M. — 190 M. **St. Johnsbury** (700 ft.; *Avenue Ho.*, $2-3), a busy little town of 7010 inhab., with the *Fairbanks Scales Works,* a *Soldiers' Monument,* a *Museum of Natural Science,* and an *Art Gallery.* It is the junction of lines to (23 M.) *Lunenburg* (p. 306) and (11 M.) *Danville,* (95 M.) *Swanton* (p. 315), and (97 M.) *Maquam,* on Lake Champlain. — 199 M. *Lyndonville* (Union Ho., $ 2), with the *Great Falls of the Passumpsic.* About 7 M. to the N.E. of (208 M.) *West Burke* lies the pretty *Willoughby Lake* (1200 ft.), between *Mt. Pisgah* or *Annanance* (2500 ft.) and *Mt. Hor* (1500 ft.). At (213 M.) *Summit Station* (1050 ft.) we cross the watershed between the Connecticut and the St. Lawrence. — 222 M. *Barton* (Barton, $2; Crystal Lake, $2), on *Crystal Lake,* is a growing little summer-resort, about 5 M. to the W. of Willoughby Lake (see above).

235 M. **Newport** (700 ft.; *Newport Ho.*, $2-$2^1/_2$, well spoken of; *Raymond,* $2), a village with 3113 inhab., is prettily situated at the head (S. end) of *Lake Memphremagog* and is a good centre for excursions. Good view of the lake from *Pine Hill. Jay Peak* 4018 ft.), 12 M. to the W., commands a wide prospect.

*Lake Memphremagog ('beautiful water'; 682 ft.), a lovely sheet of water, 30 M. long and 2-4 M. wide, lies one-fifth in Vermont and four-fifths in Canada. It is enclosed by rocky shores and wooded hills, and its waters abound in lake-trout *(salmo confinis),* pickerel, perch, and bass.

A small steamer plies daily between Newport (see above) and *Magog,* at the N. end of the lake (there and back about 6-7 hrs.). Passing *Indian Point* and the *Twin Sisters,* we cross the Canadian line near *Province Island.* On the W. (left) shore we stop at (12 M.) the foot of the prominent **Owl's Head** (3270 ft.), which is ascended hence in 2-$2^1/_2$ hrs. The *View includes, on a clear day, Montreal and the Green, White, and Adirondack Mts. Farther on the steamer passes *Long Island* and calls at some small

landings. On the E. shore are the country-houses of several wealthy Montrealers, and on the W. rises *Mt. Elephantus* (Revere Ho.). *Georgeville* (Lake Hall, $1\frac{1}{2}$), on the E. bank, 20 M. from Newport, is a quiet and inexpensive watering-place. — Magog (*Park House*), at the N. end of the lake, at its outlet through the *Magog River*, is a good fishing-station and is connected by railway (C. P. R.) with (19 M.) *Sherbrooke* (p. 304). *Mt. Orford*, 5 M. to the W., affords a good view of the Canadian pine-forests to the N. and W.

From Newport our line runs towards the N.W. to (266 M.) *Richford* (p. 315), where we cross the Canadian frontier. Hence to (343 M.) *Montreal*, see *Baedeker's Canada*.

Montreal is also reached from Newport by the Grand Trunk Railway viâ *Stanstead Junction*, *Massawippi*, *Lennoxville*, and *Sherbrooke* (comp. *Baedeker's Canada*).

d. Viâ Portsmouth and North Conway.

365 M. Boston and Maine Railroad to (140 M.) *North Conway* in 5-$5\frac{1}{2}$ hrs.; Maine Central Railroad thence to (50 M.) *Lunenburg* in $2\frac{1}{2}$-$2\frac{3}{4}$ hrs.; St. Johnsbury & Lake Champlain Railroad thence to (22 M.) *St. Johnsbury* in $\frac{3}{4}$-1 hr.; Boston and Maine Railroad thence to (44 M.) *Newport* in $1\frac{1}{2}$-2 hrs.; Canadian Pacific Railway thence to (109 M.) *Montreal* in 4-$4\frac{1}{2}$ hrs. (through-fare $9). Passengers for *Quebec* (fare $11; sleeper $2.50) may travel either viâ *Quebec Junction* and the *Upper Coos R. R.* (p. 305) or viâ *Sherbrooke* and the *Quebec Central R. R.* (p. 304). — This line forms the shortest and quickest approach to the White Mts. (R. 43) and is also one of the regular routes to Lake Winnipesaukee (see p. 316).

From Boston to (58 M.) *Portsmouth* and (70 M.) *Conway Junction*, see R. 35a. — Our line here diverges to the left (W.). 70 M. *South Berwick;* 71 M. *Salmon Falls* (p. 286); 74 M. *Somersworth*. — 80 M. **Rochester** (*Hayes, City, Wrisley*, $2-3), a small manufacturing town with 8466 inhab., is the junction of lines to (29 M.) *Portland* (p. 287) and to (18 M.) *Alton Bay* (p. 316). — 89 M. *Milton*. From (98 M.) *Sanbornville* (Rail. Restaurant) a branch runs to (12 M.) *Wolfeborough* (p. 316). Good view (right, front) of the Sandwich Range (see below). Beyond (117 M.) *Centre Ossipee* we have a view of *Lake Ossipee* to the right. — 123 M. *West Ossipee* (p. 317) is the railway-station for several small hotels in the picturesque districts of *Tamworth*, *Sandwich*, and *Wonalancet* (walks marked by blue 'blazes'; comp. little guide issued by Wonalancet Outdoor Club). — To the left are seen the *Ossipee Mts.* and the *Sandwich Mts.* (p. 316), with the finely-shaped *Chocorua* as the Eastern flanksman of the latter. We pass between *Moore's Pond* (left) and *Silver Lake* (right). Near (128 M.) *Madison* is one of the largest erratic boulders (granite) known in the United States to the E. of the Rocky Mts. (75 ft. long, 40 ft. wide, 30-37 ft. deep; prob weight 7-8000 tons). 135 M. *Conway* (Belleview Ho., $3; Conway Ho., $2), on the *Saco River*, is a quieter centre than N. Conway for the many pleasant excursions of this region. *Moat Mt.* (p. 323) is conspicuous on the left, and *Mt. Kearsarge* (p. 322) on the right.

140 M. *North Conway*, see p. 321. From North Conway to (212 M.) *St. Johnsbury*, see R. 41b; from St. Johnsbury to —

365 M. *Montreal*, see R. 42c.

43. The White Mountains.

The chief Routes from Boston to the White Mts. are given an pp. 316, 319. The main gateways are *North Conway* (p. 321), reached fit 6 hrs. (return-fare $ 6.10), and *Plymouth* (p. 317; 3½ hrs.; $ 5.30).

The chief direct Route from New York is viâ *Wells River* to *Fabyan's* or *Bethlehem* (comp. R. 47; 11 hrs.; return-fares $ 15.50, $ 15.85), but many travellers approach viâ *Boston* and *North Conway* or *Plymouth* (comp. RR. 42c, 42d; 12½ hrs.; return-fares $ 17.20, $ 17.90). A cheaper route is by steamer to *Portland* (p. 287) and thence as in R. 41.

Excursion (*i.e.* Return) Tickets at reduced fares are issued in summer and autumn in all cases, giving alternative routes in going and returning, ample 'stop-over' privileges, and a liberal allowance of time. Through-carriages are run to the principal points in the Mts., and parlor or sleeping cars are attached to all the chief trains (about $ 1½-2½ extra). Full information, with maps, time-tables, and illustrated guide-books, may be obtained on application from the railway-companies interested (comp. p. xviii). *Circular Tour Tickets* are also issued by Raymond & Whitcomb and Thos. Cook & Son (p. xxii). For the shorter excursions travellers should ask for the 'one-day excursion tickets'.

Season. The *White Mts.* may be comfortably visited any time from June to October inclusive, and pedestrians will find the earlier and later months preferable to the warmer and more crowded months of July and August. The colouring of the autumn-leaves is an additional attraction in Sept. and October. Black flies and mosquitoes are somewhat troublesome in June. The larger hotels do not open before July.

Time. The chief points of the White Mts., including *Mt. Washington*, the *Crawford Notch*, *Bethlehem*, and the *Profile House*, may be visited in a week or even less; but it is highly desirable to spend at least 2-4 weeks in the district. A visit to *Lake Winnipesaukee* (p. 316) may be conveniently combined with one to the White Mts.

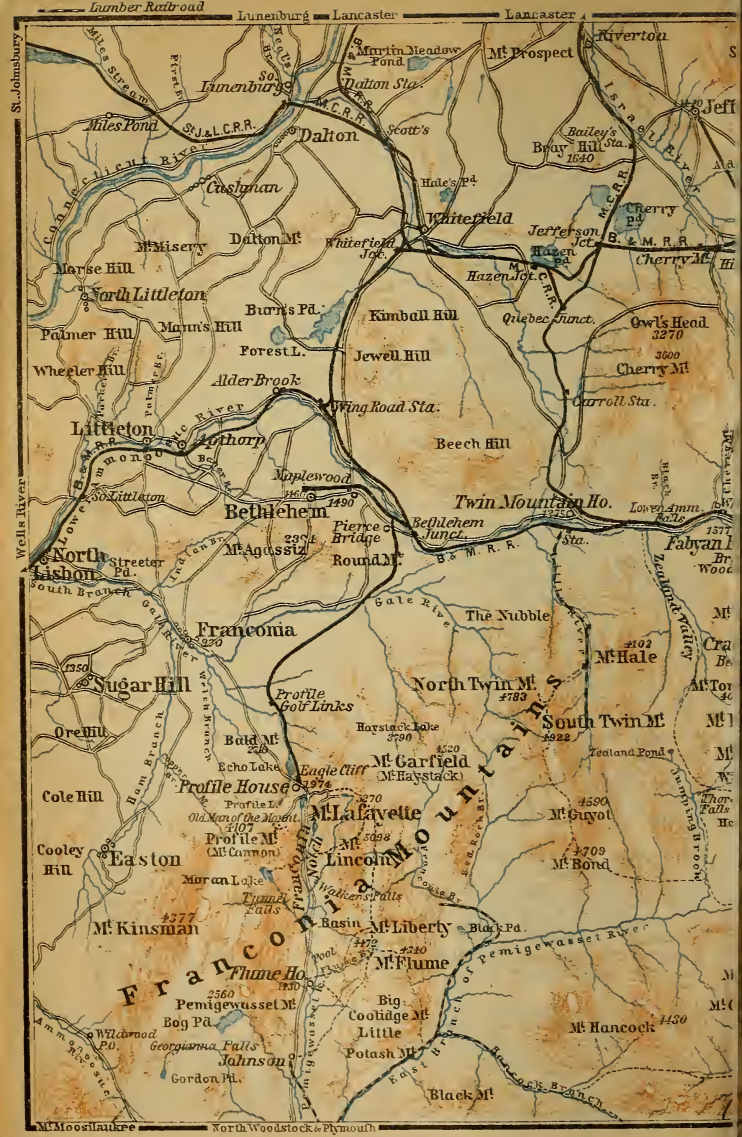
Hotels. The hotels vary from the large and fashionable summer caravanserais down to small, unassuming, and inexpensive inns and boarding-houses. As a general rule, they are good of their kind; and a special word of praise is due to the waiting of the students (male and female) at some of the larger houses. The rates vary from $ 1½ to $ 6 a day and from $ 5 to $ 30 a week. They are often lower after Sept. 10th.

Outfit. Walkers should be provided with the plain outfit suggested at p. xxii, and should be prepared for both rain and cold, especially at the higher elevations. In July and August, however, the temperature in the valleys is pretty high, and light clothing suffices. Frequent change of dress has become all too usual at the larger hotels, but those whose object is rather outdoor exercise than indoor frivolity need not yield to this custom more than they choose.

Guides are seldom found in the White Mts., as most of the main routes are easily followed. They are, however, sometimes useful for the less well-known excursions (fee $ 2-3 a day); and the pedestrian should, at any rate, refrain from visiting the less-frequented routes alone. *Vyron* and *Thaddeus D. Lowe*, of Randolph, and *Eugene Hunt*, of Jefferson, are trustworthy guides for the Great Range ($ 3-4). *George L. Howard*, of Jackson, for that district, and *Onslow S. Smith* of Passaconaway, for the S. part of the White Mts. A good pocket-compass is necessary, especially in the woods.

Carriages ('Buckboards', etc.) are easily obtained at all the chief resorts. Those hired from the hotels are expensive, but more reasonable terms may be obtained from livery-stable keepers and farmers.

The Appalachian Mountain Club (Tremont Building, Boston), founded in 1876 and now numbering 1600 members, has done good service in the White Mts. in making paths, setting up sign-posts, building camps, and preparing maps. It is now engaged in perfecting an organic system of


Lumber Railroad
Lunenburg
Lancaster
Lancaster
St. Johnsbury
Wells River
Martin Meadow Pond
Mt. Prospect
Riverton
Miles Stream
So. Lunenburg
Dalton Sta.
M.C.R.R.
Miles Pond
St.J.&L.C.R.R.
Dalton
Scott's
Bailey's Bray Hill Sta.
1640
Israel River
Jeff
Connecticut River
Gaslonan
Hale's Pd.
Whitefield
Cherry Pd.
B. & M. R.R.
Mt. Misery
Dalton Mt.
Whitefield Jct.
Jefferson Jct.
Hazen Pd.
Cherry Mt.
Morse Hill
Mt. Hazen
Hazen Jct.
North Littleton
Burns Pd.
Kimball Hill
Quebec Junct.
Owl's Head 3270
Palmer Hill
Mann's Hill
Forest L.
Jewell Hill
3600
Cherry Mt
Wheeler Hill
Alder Brook
Wing Road Sta.
Carroll Sta.
Littleton
Ammonoosuc River
Arthorp
Beech Hill
Maplewood
Bethlehem
1490
Twin Mountain Ho.
1350
Lower Ammonoosuc Falls
Fabyan's
Pierce Bridge
Bethlehem Junct.
Sta.
B. & M. R.R.
Mt. Agassiz
2380
Round Mt.
North Lisbon
Streeter Pd.
Indian Br.
Gale River
Franconia
The Nubble
2102
Mt. Hale
Sugar Hill
1350
Profile Golf Links
North Twin Mt.
4783
Haystack Lake 3790
South Twin Mt.
4922
Ore Hill
Bald Mt.
2630
Echo Lake
Eagle Cliff
Mt. Garfield (Mt. Haystack)
4520
Profile House
1974
Profile L.
Old Man of the Mount
1107
Cole Hill
Mt. Lafayette
5270
Mt. Guyot
4590
Profile Mt. (Mt. Cannon)
Mt. 5098
Cooley Hill
Easton
Lincoln
Mt. Bond
4709
Moran Lake
Basin
Mt. Liberty
Black Pd.
4377
Mt. Kinsman
Flume Ho.
1430
Mt. Flume
4250
Pemigewasset Mt.
2560
Bog Pd.
Big Coolidge Mt.
Little Coolidge Mt.
Mt. Hancock
4430
Wildwood P.O.
Georgiana Falls
Potash Mt.
Johnson
Gordon Pd.
Black Mt.
Mt. Moosilauke
North Woodstock & Plymouth
Franconia Mountains
Pemigewasset River
East Branch of Pemigewasset River
Swift River
Lost River
Kancamagus Highway
Loon Mt.
Tealand Pond
Jumping Brook
Falls
Hancock Branch
Basin Falls
Lincoln Falls
Flume Falls
Pool
Profile Lake
Echo Lake
Eagle Cliff
Haystack Lake
Tealand Pond
Jumping Brook
Falls
Hancock Branch
Basin Falls
Lincoln Falls
Flume Falls
Pool
Profile Lake
Old Man of the Mount
Lost River
Kancamagus Highway
Loon Mt.
Swift River
East Branch of Pemigewasset River
Pemigewasset River
Franconia Mountains
0 1 2 3 4 5 6
Statute Miles
5 M

Wagner & Debes Geog. Estab. Leipzig.
Berlin Falls
Mt Waumbek 4020
Upper Ammonoosuc River
Black Crescent Mt 3322
3625 Pliny Mt
Pd. of Safety
Crescent Mt 3280
Moose Br.
Gorham Sta.
Dixon
Randolph Mt 3090
Randolph Hill
Ravine Ho.
Randolph
Moose River
Bois Mt
Bowman
Appalachia Sta.
Alpine Cascade
B. & M. R. R.
Page's Pd.
Mine Brook
Mt Hayes 2600
Androscoggin River
Lead Mine
G. T. R. R.
Shelburne
Gorham
Gilead Bridge
Clements Br.
Rattle Brook
Mt Surprise 2230
Pine Mt 2440
Miss Barnes Br.
Madison Br.
Peabody River
Bald Mt 3750
Mt Winthrop 1575
West Br.
Mt Moriah 4065
Imp Brook
Imp Mt 3735
Cascade Camp
Mt Madison 5380
Hut
Mt Adams 5805
Mt Mitten 3080
5725 Mt Jefferson
West Br.
Mt Carter 4645
Mt Clay 5554
Half Way Ho.
The Ledge
Jacob's Ladder
The Base Sta.
Glen House
Emerald Pool
Thompsons Falls
Summit Ho.
Carter Notch
Carter Dome 4860
Wild River
6293 Mt Washington
L. of the Clouds
Tuckerman's R.
Mt Monroe 5390
Mt Wild Cat 4415
Crystal Casc.
5028 Mt Franklin
Glen Ellis Falls
North 3605
Mt Baldface 3585
South
4775 Pleasant Dome 4275
Mt Clinton
Perkins Notch
Sable Mt 3330
2958
Mt Jackson 4012
Mt Webster 3876
Willey Ho.
White Mountains
Pinkham Notch
Ellis River
Black Mountain
Sloop Mt
2220
Spruce Mt
Mountain Pd.
Mt Carrigan
Giant's Stairs 3423
Miles Br.
Eagle Mt
Doublehead Mt
Jackson Falls
The Twins
Mt Resolution 3400
760 Jackson
Tin Mt
Iron Mt 2725
Goodrich Falls
2265
Province Pd.
Burdknell Br.
Mt Crawford 3100
Thorn Mt
Mt Parker
Jericho
Glen & Jackson Sta.
Bemis Sta.
Mt Langdon
Lower Bartlett
Mt Kearsarge 3270
Hart's Mt
Mt Pickering
Mt Stanton
Shingle Pd.
Sawyer's River
Saco River
Bartlett
M. C. R. R.
Intervale House & Sta.
546
Kearsarge Vill.
Hurricane Mt
Diana's Bath
Cathedral
Echo L.
North Conway
Black Cap
Mt Tremont
Silver Spring Mt
Mt Attitash 2980
White Horse Ledge
520
Artists Falls
Fryeburg
Thompson Falls
Peaked Mt
Moat Mt 3195
Rochester
Portland
Middle Mt 1350
Kilometres
0 2 4 6 8 10

main through-route footpaths, by which it will be possible to traverse nearly all the principal ranges and valleys from end to end, or to cross from one valley to another. The Club also maintains registers in copper cylinders on most of the less-frequented summits for records of ascents. Its periodical, *Appalachia*, contains much valuable information. Admission fee $ 8, annual subscription $ 4. — The best map of the White Mts. is that published by the *Scarborough Publishing Co.*, 144 Essex St., Boston (2 M to the inch), and the best guidebook (so far as it goes) is that issued by the Appalachian Mountain Club (Part I, 1907; $ 1).

The White Mountains form the central portion of the Atlantic system of monntains extending from the peninsula of Gaspé to Alabama. In the ordinary use of the term, they cover an area of 1300 sq. M. in the state of New Hampshire, extending from the Androscoggin and Upper Ammonoosuc on the N. to the base of the Sandwich Range on the S. (a distance of 30 M.), and from the Maine frontier on the E. to the vailley of the Connecticut on the W. (45 M.). The higher mountains rise from a plateau about 1500-1600 ft. above the sea, and attain an extreme elevation of 5-6000 ft. They are roughly divided into two main groups, the White Mts. proper to the E. and the Franconia Mts. to the W. In the original and narrowest sense the name of White Mts. is restricted to the *Great* or *Presidential Range*, extending for abour 13 M. from Mt. Madison on the N.E. to Mt. Webster on the S.W. This range culminates in *Mt. Washington* (6293 ft.), the highest point to the E. of the Rockies and to the N. of N. Carolina. The great mass of the White Mts. consists of granite, overlaid by mica slate. The scenery of the White Mts. is of a very beautiful and varied nature; and though few of the summits are sharp enough to deserve the name of peaks, many of them (such as Mt. Washiugton aud Mt. Lavaeytte) are of very noble outline. They are visited annually by many thousands of summer-guests, and all the chief points are of easy access. The first white visitor is said to have been Darby Fleid, in 1642.

The following account notices the chief tourist-centres.

a. North Conway.

North Conway (520 ft.; *Kearsarge*, from $ 3½, very fair; *Sunset*, $ 3-3½, rear rooms in both these near raiway; *New Ridge Hotel*, $ 3; *Eastman*, *Randall*, $ 2-3; numerous bearding-houses), charmingly situated on a low terrace above the 'intervales' of the winding *Saco River* (pron. 'Sawco'), is a station on both the M. C. and B. & M. railroads. It is a favourite resort with those wo like to combine the softer beauties of the valley with excursions into the mountains. To the W. rises *Moat Mt.*, to the E. the *Green Hills* aud to the N.E. *Mt. Kearsarge* and *Hurricane Mt.*, while to the N. and N.W. more distant views are obtained of Mt. Washington and other lofty summits. Good golf-course (9 holes). About 1½ M. to the N. lies the pretty and sequestered little hamlet of

Intervale (550 ft; *Intervale Ho., $3½-5; Bellevue, $2½-3; Pendexter, $2-3; stat., p. 305); and near Mt. Kearsarge (see below) 2 M. to the N.E., is *Kearsarge Village* (Russell Cottages, $3).

To Echo Lake and the Ledges, 2-2½ M. From the *Kearsarge Hotel* we follow the road to the N. to (7 min.) the *Sunset Hotel*, take the road to the left here (which soon passes below the railway), and cross the (7 min.) Saco by a covered bridge. A few hundred paces farther on we cross a branch of the river. About 8 min. farther on, at another brook, the road forks, the left branch leading to Echo Lake, the right to the Devil's Den (see below). We follow the former. At the (12 min.) cross-roads we continue in a straight direction. 3 min. *Echo Lake (925 ft.), a tiny lake, finely situated at the base of a bold rocky bluff which has been prominent during most of our walk. This is the *White Horse Ledge* (so called from a patch of white rock), one of a series of so-called *Ledges* (100-900 ft.), or cliffs, in which Moat Mt. ends on this side. Following the bank of the lake towards the N. and disregarding roads leading back to the right, we reach (7 min.) a path leading through wood to the left, which ultimately crosses a fence and reaches (8 min.) a road. We follow the road in the same direction past a quarry, just beyond which are a small refreshment hut and the *Devil's Den*, under an overhanging slab of rock. We now return to the point whence we emerged from the forest-path, and follow the road to the left. At (6 min.) the highroad (white farm-house) we turn to the right. 10 min. *Bridge*, where we diverged to the left for Echo Lake (see above). [By turning to the left on regaining the highroad and following it for ¾ M., we reach a sign-post pointing to *Diana's Baths*.]

To Artists' Falls, 1¾ M. We proceed to the S. from the Kearsarge Hotel, past the Maine Central R. R. Station, to (10 min.) the bridge over *Artists' Brook;* then turn to the left and follow the road, crossing another bridge, to (12 min.) the *North Conway Keeley Institute* (formerly *Artists' Falls Hotel*). A path to the right leads to (5 min.) the *Forest Glen Mineral Spring* (alkaline). To reach the falls we take the right branch of the fork opposite the spring, and in 5-6 min. more reach their side. The *Artists' Falls* are small, but pretty in wet weather.

*Ascent of Mt. Kearsarge (5-6 hrs. there and back). Going N. from the Kearsarge Hotel, we take the (3 min.) second turning to the right (sign-post 'to Kearsarge Village'), cross the railway, and (5 min.) turn to the left. This road leads through *Kearsarge Village* (see above) to (1¼ M.) a small church, where we turn to the right. ⅓ M. *S. Eastman's Farm House* (carr. to this point, 50 c. a head; horse hence to the top $2; guide, unnecessary, $2; ascent hence in 1¾-2¼ hrs.). The path, which is steep and stony at first, comparatively easy in the middle, and steep towards the top, begins behind the farm-house, crosses fields, and enters (8 min.) the wood. 25 min. Path leading back to the right to *Prospect Ledge* (*View of Saco Valley, Moat Mt., etc.). About 10 min. farther up we pass a small spring (to the right). In 10 min. we emerge from the wood and reach the rocky ledges, and soon see a small cairn a little to our right. It is not easy to give directions from this point, but by noting the worn part of the rocks and keeping a look-out for the cairns, we reach the top in about 1 hr. more. At first we keep to the right and then swing round to the left to approach the summit from the W. The noble *View from the pyramidal Mt. Kearsarge, *Kiarsarge*, or *Pequawket* (3270 ft.; rfmt. hut at the top) includes the Saco Valley to the S. and W.; Mt. Chocorua and the bare ridge of Moat Mt. to the S.W.; Moosilauke (p. 317; in the distance), Mt. Hancock, Mt. Carrigain, and Mt. Lafayette, to the W. and W.N.W.; most of the main summits of the White Mts., including a grand view of Mt. Washington, to the N.W.; the Wild-Cat and Carter Mts., with the Carter Notch between, to the N.; and several lakes and ponds, including Lake Sebago, to the E. and S.E. The other Mt. Kearsarge (p. 314), 60 M. off, is seen to the left of Chocorua. The descent may be made to Bartlett (p 305). In descending to N. Conway a little care is necessary to follow the route over the ledges. In the wood we keep mainly to the right, as nearly possible straight down the incline.

Moat Mountain (N. peak, 3195 ft.; *View) may be ascended in 3-4 hrs. from North Conway by an A. M. C. path (sign-posts and cairns) beginning near (3 M.) *Diana's Baths* (p. 322). The path along the ridge of Moat Mt. is plain, and the descent may be made viâ the S. peak (2775 ft.) to the *Swift River Road* and *Conway Centre* (p. 304). — *Middle Mt.* (1850 ft.), another good point of view, is ascended in 1 hr. by a path beginning near the Forest Glen Mineral Spring (p. 322). The adjoining *Peaked Mt.* (1780 ft.; 1 hr.) is also easily ascended, while a road (views) leads across *Hurricane Mt.* (2110 ft.) to *Fryeburg*, in Maine (p 304).

Among the favourite DRIVES from N. Conway are those '*Around the Square*' (5 M.), the '*Dundee Drive*' (12 M.), and to *Jackson Falls* (9 M.; see below). The distance through the *White Mountain Notch* to the *Crawford House* (see p. 325) is 26 M.

COACHES run regularly in summer from N. Conway to (9 M.) *Jackson* (see below), passing (5 M.) *Glen Station* (p. 305).

b. Jackson and the Glen House.

Jackson (760 ft.; *Wentworth Hall*, with annex-cottages, $4-5; *Gray's Inn*, $2½; *Jackson Falls Ho.*, $2-2½; *Glen Ellis Ho.*, *Eagle Mt. Ho.*, *Iron Mt. Ho.*, $2-3; boarding-houses) is overshadowed by *Iron Mt.* (2725 ft.) and *Thorn Mt.* (2265 ft.). Good fishing. Wentworth Hall has a small golf-course and good tennis-courts.

The chief excursion from Jackson is the fine walk up the glen of the *Wild-Cat Brook* (with the *Jackson Falls*) to the (8 M.) *Carter Notch* (p. 324), between *Mt. Wild-Cat* (4415 ft.) and the *Carter Dome* (4800 ft.). Other excursions are made to *Goodrich Falls*, 1½ M. to the S. (fine after heavy rain only); to the top of (1 hr.) *Thorn Mt.* (2265 ft.); to (4½ M.) *Fernald Farm* (view of Mt. Washington); to (6 M.) *Prospect Farm* (wide views) and on to (½ M.) *Hall's Ledge* (view of Mt. Washington and Tuckerman's Ravine); to the (3 M.) *Winniweta Falls*, etc.

Carriage to (20 M.) the top of *Mt. Washington* $6 each, incl. toll (there and back $8); to *Gorham* (p. 324) $5 each.

The road from Jackson to the Peabody Glen runs to the N. along the *Ellis River*, passing through the wooded *Pinkham Notch* (2018 ft.) and affording glimpses to the left of the deep ravines of Mt. Washington. About 8 M. from Jackson a path to the right (sign-post) leads to the (¼ M.) **Glen Ellis Falls* (70 ft.), and a little farther on, to the left (sign-post), an A. M. C. path diverges for the (⅜ M.) **Crystal Cascade* (80 ft.; hence to *Tuckerman's Ravine*, see pp. 332, 333). A steep road to the left farther on (now impassable for carriages) joins the (1½ M.) carriage-road from the Glen Ho. to Mt. Washington (p. 332), 2 M. above the toll-house. About 1½ M. farther on, to the right, is a path leading to (¼M.) *Thompson's Falls* (guide-board). To the left, within 100 yds. of the road, is *Emerald Pool*.

12 M. (from Jackson) *Glen House* (1630 ft.; $2), an unpretending hostelry recently erected on the site of a large summer-hotel, burned down in 1894. The old hotel, owing to its fine situation on the *Peabody River*, at the N.E. base of Mt. Washington, with Mts. Clay, Jefferson, Adams, and Madison forming a grand line of summits to the N. of it, was long a favourite centre for excursions in the White Mts. and particularly for the ascent of Mt. Washington,

the carriage-road to the top of which begins here (comp. p. 332). The new house plays the same rôle on a more limited scale, and is largely frequented for meals by automobile and driving parties.

Among the ascents conveniently accomplished from this point are those of *Carter Dome* (4860 ft.; to the *Carter Notch*, 3150-3300 ft., with an A. M. C. camp, 3-4 hrs.; thence to the top 1½-2½ hrs.) and *Mt. Wild-Cat* (4415 ft.; 1-1½ hr. from Carter Notch). The latter commands a fine *View of Mt. Washington. — Good walkers taking the Osgood Path, may reach the top of *Mt. Washington* viâ Mts. Madison, Adams, Jefferson, and Clay in 9 hrs. (with guide); and the Appalachian Club has also constructed a blazed path along the whole *Carter Range* (9 M.; fine views; A. M. C. camp near top of *Imp Mt.*, 3735 ft., see below) to *Mt. Moriah* (see below). — On the Peabody, about ¾ M. to the N., are the so-called *Garnet Pools*, and 1¼ M. to the N.W. are the *Osgood Cascades*. — *Tuckerman's Ravine*, see p. 333.

Beyond the Glen House the road descends through the ***Peabody Glen**, affording a series of fine views. By crossing (2 M.) the bridge over the Peabody and turning to the right, we may reach a point revealing the profile of *Imp Mt.* (see above). Farther on our road crosses the river and soon reaches —

19 M. (from Jackson) *Gorham.*

c. Gorham and Randolph.

Gorham (810 ft.; *Mt. Madison Ho.*, $ 2-3; *Island View Ho.*, $ 2), the N. gateway to the White Mts., is a village with about 1800 inhab., finely situated at the confluence of the *Androscoggin* and the *Peabody* and commanding a charming view of hill and valley. To the S. is the Peabody valley, with Mts. Moriah and Carter to the left; to the N.E., Mt. Hayes; to the N.W., the Pilot Mts. The peaks of the Presidential Range (see p. 321) are concealed by *Pine Mt.* (2440 ft.), which rises in the S.W. foreground, but they are well seen from adjacent points.

A good point of view in the immediate vicinity is the *Lary Farm* 1¾ M. to the N.). — Perhaps the best of the shorter walks is that to the top of Mt. Hayes (2600 ft.; 2½-3 hrs.), 2 M. to the N.E. The easy and well marked path begins at the N. end of the suspension-bridge over the Androscoggin and ascends directly, through wood, to (1½ M.) the ridge and (½ M.) the summit. The *View includes (from left to right) Mt. Moriah, Imp Mt., and Carter Mt. to the S.; the valley of the Peabody (Pinkham Notch), a little to the right; to the S.W., Mt. Washington, the low Pine Mt. (in the foreground), Mt. Madison, and Mt. Adams; to the W., Cherry Mt., Owl's Head, and (more to the right) Randolph Mt. and Mt. Starr King; to the N.W., the Pilot Mts., Deer Mt., and the twin Percy Peaks. Some authorities consider this the best view of Mt. Washington.

Mt. Surprise (2230 ft.), a spur of Mt. Moriah, to the S.E. of Gorham, may be ascended in 2 hrs. by a path through wood (boy to show its beginning desirable), and commands a fine *View of the Presidential Range (camp at the top). — A well-marked path leads hence to the (2-3 hrs.) top of *Mt. Moriah* (4065 ft.; *View), whence the walk may be continued along the Carter Range (see above).

Mountain-waggons run in connection with the train, from Gorham, viâ the Glen House (p. 323) to the top of (16½ M.) *Mt. Washington* (5 hrs.; return 3 hrs.; fare $ 8; comp. p. 333). Stages also ply to (19 M.) *Jackson* (4 hrs; fare $ 4; comp. p. 323).

Pleasant drives may also be taken along the S. bank of the Androscoggin to (11 M. to the E.) *Gilead Bridge*, returning on the N. bank by

the *Lead Mine Bridge* (3½ M. from Gorham; *View); to the N., along the 'Milan Road' to (6 M.) *Berlin* (p. 303) and (14 M.) *Milan Corner;* and W. to the *Crawford House* and the *White Mountain Notch* (see below), either (35 M.) viâ (17 M.) *Jefferson*, the 'Cherry Mt. Road', the *White Mt. House*, and the *Fabyan House* (see p. 327; splendid views), or (25 M.) by the new road leaving the Jefferson road between *Bowman* (see below) and *Jefferson Highlands* (p. 303) and ascending through the *Jefferson Notch* (comp. Map). A grand walk for a good pedestrian would be to ascend *Mt. Madison* (p. 333) and proceed thence viâ *Mts. Adams* and *Jefferson* (see p. 334) to *Mt. Washington* (guide necessary; 1-2 days).

Gorham is a station on the Grand Trunk Railway from Portland to Montreal, and on the B. & M. line from Berlin to Whitefield (comp. p. 303, and Map, p. 320). The stations are 2 M. apart (stage).

Randolph s the name of the township adjoining Gorham on the W. and as a tourist centre may be taken to include the vicinity of the three stations *Randolph*, *Appalachia*, and *Bowman*, on the railway from Berlin and Gorham to Whitefield (comp. p. 303). The chief hotels are the *Ravine House* ($ 2½) at Appalachia, the *Mt. Crescent House* ($ 2), and the *Mountain View House* ($ 2). Randolph is frequented mainly by 'mountaineers', and its guides (comp. p. 320) are the best in the district (see map in A. M. C. guidebook mentioned at p. 321).

The chief ascents from Randolph are the following: *Mt. Madison* (5380 ft.), from Appalachia, in 3-4 hrs. (comp. p. 333); *Mt. Adams* (5805 ft.; *View), either from Appalachia in 3½-4½ hrs. by the Air Line Path (A. M. C.) or from Bowman viâ Lowe's Path in 3½-4 hrs.; *Mt. Jefferson* (5725 ft.), from Bowman by the Castle Path (A. M. C.) in 4½-5 hrs.; *Mt. Washington* (p. 331), viâ Mt. Jefferson, in one day. From 'Lowe's Path' (see above) a fatiguing path ascends to the left through **King's Ravine* to the top of Mt. Adams. — *Randolph Hill* (1700 ft.), 3 M. from Randolph by a good road, commands a fine view of the Presidential Range. — The three stations named above all lie on the road between Gorham and Jefferson (comp. above) and may be made the starting-point of various pleasant drives.

d. Crawford House and the Notch.

The ***Crawford House** (1900 ft.; from $ 4½ a day or $ 21 a week; somewhat cheaper at the Annex; golf and tennis), one of the most popular hotels in the White Mts., occupies a solitary site on a small plateau, ¼ M. above the N. entrance to the White Mt. Notch. The small pool in front of the house is the source of the *Saco River*, flowing to the S. through the Notch to Maine and the sea, while the *Ammonoosuc*, also rising close to the hotel, flows N. (and then W.) to the Connecticut. The railway-station (p. 305) is near the hotel. To the S.W. rises *Mt. Tom* and to the E. *Mt. Clinton*, while in front, enclosing the Notch, are *Mt. Willard* (right) and *Mt. Webster* (left; see p. 326).

The railway route through the ***Crawford** or **White Mountain Notch** (1915 ft.) has been described at p. 305 and affords some of the finest, though most fleeting, views of it. The Notch is seen to greater advantage in descending. The road and river enter it through a rocky **Gateway*, 25 ft. wide, while a separate cutting has been made for the railway (above, to the right). To the left is the rock known

as the *Elephant's Head* (*View). Within the Notch various fantastic names have been given to rocks supposed to resemble human faces, etc. About 3/4 M. from the Crawford Ho., to the left, the *Flume Cascade* descends, in three leaps, from a height of 250 ft.; and 1/4 M. farther on is the graceful **Silver Cascade*, with a total fall of 900 ft., of which about 300 ft. are seen from the road. The *Willey House* (1325 ft.), a small inn 3 M. from the Crawford Ho. and 300 ft. below the railway, was the scene of a terrible disaster in Aug., 1826. The whole Willey family, 9 in number, rushing from the house to escape a land-slip, apparently descending directly upon it, were overtaken and crushed, while the house escaped harm through the splitting of the land-slide by a rock. The Notch proper ends just below the site of the Willey Ho. (burned down in 1899), but it is well worth while to continue the walk or drive to Bemis, whence, if necessary, we may return by railway. At the (1 1/4-1 1/2 M.) *Cow* or *Avalanche Brook* (the second brook below the Willey Ho.), we may cross the railway and ascend to the right to (1 3/4 M.) the **Ripley* or *Sylvan Glade Falls* (110 ft.), about 1 M. above which is the *Sparkling Cascade.* Continuing to follow the road along the Saco, we reach (2 M.; 6 1/2 M. from the Crawford Ho.) *Bemis Brook*, along which a path ascends to (1 M.) the picturesque **Arethusa Falls* (175 ft.). *Bemis* (rail. stat., p. 305) is 2 M. farther down. The Mts. to the left at this part of the road are the *Giant's Stairs* (3423 ft.), *Mt. Resolution* (3400 ft.), and *Mt. Crawford* (3100 ft.), while *Mt. Nancy* (3810 ft.) towers to the right. Drivers may go on from Bemis to (18 1/2 M.) *North Conway* (p. 321).

*Mt. Willard (2786 ft.), easily ascended by a carriage-road (2 M.), crossing the railway below the station, commands a splendid *View of the Notch (afternoon-light best). Near the top (S. side) is a cavern known as the *Devil's Den*, accessible by ropes only. The *Hitchcock Flume*, 350 ft. long and 50 ft. high, is reached by a path to the left, 1/4 M. from the summit. — Ascent of **Mt. Washington*, see p. 333. — Ascents of *Mts. Clinton* (4275 ft.), *Franklin* (5023 ft.), *Monroe* (5390 ft.), and *Pleasant Dome* (4775 ft.), see p. 333. — The ascent of *Mt. Webster* (3876 ft.) is comparatively easy and well worth-while. — The views from *Mt. Tom* (4040 ft.) and *Mt. Field* (4300 ft.) are obscured by trees, but that from the easily ascended *Mt. Avalon* (3432 ft.; 1 1/2 hr.), a spur of Mt. Field, is fine and almost unrestricted. — A better view is obtained from *Mt. Willey* (4260 ft.; 2-3 hrs.; well-marked path beginning just above *Willey Station*, 4 M. from the Crawford House).

Pleasant short walks may be taken to (1/2 M.) the *Elephant's Head* (see above), *Beecher's Cascades* (3/4 M.; path crossing a foot-bridge over the railway and ascending through wood on the left bank of the stream), **Pearl Cascade* (1 M.), *Bugle Cliff* (3/4 M.), *Red Bench* (1/2 M.; view of Mt. Washington), and the *Shapleigh Path* (1 M.). *Gibbs Falls* (1/2 M.) are reached by turning to the left and ascending through wood and along a brook.

Between the Crawford House and (4 M.) *Fabyan's* (p. 327) the road and railway descend 330 ft. (80 ft. per mile).

e. Bretton Woods, Fabyan House, Twin Mt. House, and Zealand.

Bretton Woods (an old name revived), 3 1/2 M. from the Crawford House, is the station for the **Mt. Washington Hotel* (500 beds; from $5 or $6 per day) and the older **Mt. Pleasant House**

(from $4\frac{1}{2}$ a day or $25 a week). The former (ca. 1600 ft.), the most pretentious hotel in the White Mts., is splendidly situated on a spur of Mt. Deception (see below) and commands a magnificent view. It is a great resort of automobilists. The Mt. Pleasant House is close to the railway-station (p. 305). Between the two hotels lies a rather flat golf-course.

From the Mt. Pleasant House a path ascends to the top of *Mt. Stickney* (2570 ft ; view). — A coach runs on week-days between the Mt. Washington Hotel and the Crawford Ho. (p. 325).

Upper Falls of the Ammonoosuc, $2\frac{3}{4}$ M. from the Mt. Washington Hotel. We follow the road to the left, passing a *Monument to E. A. Crawford*, one of the earliest settlers in the White Mts. The **Falls* (30-40 ft. high) are picturesque, with their grey granite walls, water-worn basins, and grand mountain-background. — The ($2\frac{3}{4}$ M.) *Lower Ammonoosuc Falls* are near the White Mt. House (see below).

The **Fabyan House** (1577 ft.; from $4\frac{1}{2}$ a day, or $21 a week; less at the Annex), another large hostelry, stands on the site of the *Giant's Grave*, a drift-mound on the Ammonoosuc river, $\frac{1}{2}$ M. to the W. of the Mt. Washington Hotel. It commands fine views of the mountains and is the junction of the railway to the top of Mt. Washington (see p. 331; comp. pp. 305, 318).

The old *White Mt. House* ($2\frac{1}{2}$), $\frac{3}{4}$ M. to the N.W. (rail. stat., see p. 305) is smaller and cheaper. A path ascends hence to the top of *Mt. Deception* (3700 ft.).

The **Twin Mountain House** (1375 ft.; from $3 a day or $14 a week; rail. stat., p. 305) is pleasantly situated on the Ammonoosuc, 5 M. to the W. of the Fabyan House, but does not command so fine a view. The mountains opposite it are *Mt. Hale* (4102 ft.; left) and the *North Twin* (4783 ft.; right), the latter concealing the *South Twin* (4922 ft.). The smaller *Rosebrook Inn* ($2) may also be mentioned.

The path to the top of the *North Twin Mt.* is marked with sign-posts, but a guide is desirable (3-4 hrs.). The continuation thence to the *South Twin*, *Mt. Guyot* (4590 ft.), and (4 hrs.) *Mt. Bond* (4709 ft.) may be followed with little difficulty. The fine *Cliffs of Bond* are to the S.W. of the main summit. From the top of Mt. Bond the trail descends to the S.E. to (3 hrs.) the *Pemigewasset River*, whence a walk of $1\frac{1}{2}$-2 hrs. more brings us to a lumber railroad near the Franconia Trestle. This excursion necessitates a night in camp.

From *Zealand*, 1 M. to the E. of the Twin Mt. Ho., we may follow a disused railway-track to (7 M.) *Zealand Pond* (2460 ft.) and (9 M.) *Thoreau Falls*, which descend 200 ft. in $\frac{1}{2}$ M., in the deep valley between Mt. Bond (see above) on the right and the Willey Mt. (p. 326) on the left.

f. Bethlehem and Maplewood.

Bethlehem and *Maplewood* are reached by a short railway from *Bethlehem Junction* (comp. p. 305).

The train from *Bethlehem Junction* (p. 305) crosses the *Ammonoosuc* and soon reaches —

2 M. **Maplewood**, a small station for a group of hotels and summer cottages. The **Maplewood* (1490 ft.; from $5, weekly from $21; 400 guests), one of the handsomest and most fashionable hotels in the White Mts., commands a splendid distant *View of Mt. Washington.

Adjacent are the *Maplewood Cottage* (from $3 a day and $12½ a week) and an excellent *Golf Course*. Public conveyances run frequently to Bethlehem (10 c.). *Mt. Agassiz* (see below; 2 M.) is ascended by a path beginning behind the Maplewood Hotel and proceeding through wood past (1 M.) a view-tower. The Bethlehem (excursions see below) may all be made from Maplewood.

3 M. **Bethlehem** or *Bethlehem Street* (*Sinclair Ho.*, from $ 3½; *Highland Ho.*, *The Alpine*, *The Uplands*. *Arlington*, $ 2½-3; *Turner Ho.*, $ 2-2½; and many others), with 1260 inhab., finely situated 1460 ft. above the sea and 260 ft. above the Ammonoosuc, is visited annually by 10-15,000 summer-guests. It commands magnificent views of the White and the Green Mts. The 'White Mountain Echo' is published here. Bethlehem is said to be immune from hay fever, and the Hay Fever Convention meets here annually.

Mt. Agassiz (2394 ft.), which rises at the back of the village, is ascended in ¾-1 hr. We follow the road leading S. from the Sinclair Ho. to (25 min.) a house with a sign referring to the toll to Mt. Agassiz (25 c., payable at the summit, only by those who wish to enter the view-tower). A carriage may be obtained here for the rest of the trip (there and back 50 c. each; from Bethlehem, ordered by telephone, 75 c., from Maplewood $ 1). Here we turn to the left and follow the path through wood to (25 min.) the top. The *View includes mountains on every side, the names of which are given by rough mountain-indicators on the top of the view-tower. Mt. Washington is seen to the E., Mt. Lafayette to the S., the Green Mts. to the W. The descent may be made to *Maplewood* (p. 327; not advisable in waning light, as the 'trail' through the woods is not very distinct). — *Cruft's Ledge*, 2 M. to the E. (reached by a path beginning beyond the Maplewood Hotel), and *Wallace Hill*, 3¼ M. to the W., are other good points of view. — Favourite drives are the *Cherry Valley Drive* (5 M.), *Around the Heater* (6 M.; views of Franconia Mts.), to (7 M.) *Twin Mt. Ho.*, to (7½ M.) *Sugar Hill*, to (10 M.) *Profile House* (also reached by train, see below), to (15 M.) *Jefferson*, and to (17 M.) *Crawford House*. To reach the top of *Mt. Washington* viâ Fabyan's takes 2-2½ hrs. by train.

g. The Franconia Mts. Profile House.

The **Franconia Mts.**, included in the wider acceptation of the name White Mts. (see p. 321), is the small group of summits between the Twin Mt. Range on the E. and the Pemigewasset Range on the W. The sharp-peaked *Mt. Lafayette* (p. 329) is the monarch of the group, and the *Profile House* is the chief tourist-centre. On the W. the range is bounded by the Franconia Notch (p. 329), though in popular speech the term includes the mountains to the W. of this valley. Most of the Franconia Mts. are densely wooded.

The *Profile House* is reached from *Bethlehem Junction* by a branch-railway, 10 M. long, which runs through wood and affords little view. To the right, as we approach the terminus, lies *Echo Lake* (p. 329). — Route to the Profile House from *Plymouth*, through the *Pemigewasset Valley*, see p. 317.

The ***Profile House** (1974 ft.; from $ 5 or $ 6, weekly from $ 30), one of the largest of the White Mt. hotels, stands, with its group of cottages, at the N. end of the Franconia Notch (p. 329), to the W. of Mt. Lafayette.

About 1/2 M. to the N. of the hotel, to the right (E.) of the road, is the pretty little *Echo Lake (1925 ft.), where fine echoes are aroused by bugle (small fee; steam-launch round the lake, 1-5 pers. 75 c., each addit. pers. 15 c.). At the foot of the lake is *Artists' Bluff*, a good point of view. — *Eagle Cliff* (1470 ft. above the hotel), close to the hotel on the E., is a fine specimen of rock-formation (well seen from Profile Mt.). — **Profile Mt.** or **Mt. Cannon** (4107 ft.), opposite the Eagle Cliff, is ascended in 2-2 1/2 hrs. by a somewhat steep path beginning to the S. of the hotel and running first through wood and then over rocky ledges. *View of Mt. Lafayette. The *Cannon Rock* lies a little below the summit, on the E. side. The *Profile Ledges* (see below), reached from above by a somewhat steep scramble (no path), afford one of the best points of view. — *Bald Mt.* (2310 ft.), to the N. of Echo Lake, is easily ascended in 1/4 hr. by a cart-track diverging to the right from the road, 1 M. to the N. of the hotel (*View; afternoon-light best). — ***Mt. Lafayette** (5270 ft.) is ascended in 2 1/2-3 1/2 hrs. by a steep bridle-path diverging to the left from the road in front of the hotel and skirting the S. side of Eagle Cliff (to *Eagle Lakes*, 1 1/4-1 3/4 hr.; thence to the top about as long). The sharp pyramidal summit commands a splendid *View, including the Pemigewasset Valley to the S., the Connecticut Valley and the Green Mts. to the W., and Mt. Garfield (close at hand) and the Presidential Range to the N.E.

Most of the excursions from the Flume House (see below) can be made from the Profile House at a small additional expenditure of time.

The ***Franconia Notch** is a narrow wooded defile, 5 M. long, traversed by the Pemigewasset River and flanked by the Franconia Mts. on the E. and the Pemigewasset Range on the W. It lies about 2000 ft. above the sea, and the enclosing mountains rise 1500-3000 ft. higher. Frequent coaches run through the Notch to (5 M.) the Flume Ho. and thence to (5 M.) *North Woodstock* (p. 317).

Starting from the Profile House to walk or drive through the Notch to (5 M.) the Flume House (see below), we soon reach a sign-post by the roadside marking the best point of view for the ***Profile** or *Old Man of the Mountain*, a curious freak of nature formed by three protruding and disconnected ledges, 1200 ft. above us, on the side of Cannon or Profile Mt. (right; see *Hawthorne's* 'Great Stone Face'). Below the Profile, to the right of the road, 1/2 M. from the hotel, is *Profile Lake* (boats). The road for the most part runs through wood and affords no views. About 2 1/2 M. from the hotel, to the right, a bridle-path diverges to (1 1/4 M.) *Lonesome* or *Moran Lake*, on Cannon Mt., 1000 ft. above the road. To the left, 1/2 M. farther on, a sign-post points the way to *Walker's Falls* (1/2 M.) and *Cataract* (1 M.). These lie in a ravine below *Mt. Lincoln* (5098 ft.), to the S. of Mt. Lafayette. To the right, 1 M. farther on, is the *Basin*, a small pool by the roadside, where the imaginative see the form of a human foot and leg in the rocks. A brook coming in here may be ascended to (3/4 M.) the *Tunnel Falls*.

5 M. The ***Flume House** (1430 ft.; $3 1/2, weekly from $14), at the S. end of the Franconia Notch, is smaller, quieter, and cheaper than the Profile House, and well situated for excursions. It lies at the base of *Mt. Pemigewasset*, opposite *Mt. Liberty* and *Mt. Flume*.

A sign-post in front of the hotel indicates the route to (3/4 M.) the *Flume, a fine rocky gorge, 700 ft. long, 60-70 ft. high, and 10-20 ft. wide. It is traversed by a foaming stream, up which the path is carried

by wooden galleries and bridges. Traces are still discernible of the landslip of 1883, which carried away the boulder formerly suspended in the narrowest part of the ravine. — Another sign-post in front of the hotel points to (1/2 M.) the **Pool*, a basin in the solid rock, 150 ft. wide and 40 ft. deep, over-shadowed by cliffs 150 ft. high. — The (3 M.) **Georgianna* or *Harvard Falls* (two leaps of 80 ft.) are reached by a path leaving the highroad to the right at a farm-house (guide), 1 M. to the S. of the Flume House.

Mt. Liberty (4472 ft.; view) may be ascended in 3-4 hrs. (descent 2-3 hrs.) by a path viâ the head of the Flume and *Langton's Falls*. This path is continued to the (2 M.) top of *Mt. Haystack*. A long (9-10 hrs.) but interesting walk leads along the ridge from Mt. Liberty to Mt. Lafayette, viâ Mt. Haystack. — The ascent of *Mt. Flume* (4340 ft.; *View) is somewhat arduous. — *Mt. Pemigewasset* (2560 ft.), ascended by a steep bridle-path in 1/2-1 hr., is a good and easily reached view-point.

Franconia (920 ft.; *Forest Hill Hotel*, from $ 4, for automobile parties from $ 3 1/2, 1 1/2 M. from the village of Franconia and 7 M. from Littleton; *Peckett Cottages*, from $ 3 or $ 3 1/2, 1 M. from the village; *Mt. Lafayette Ho.*, $ 2, etc.), situated on the *Gale River*, 6 M. to the S. of Littleton (p. 318; daily coaches), 4 M. to the S.W. of Bethlehem, and 4 M. to the N.E. of the Profile Ho., is frequented by many summer-visitors. It affords good views of the Franconia Mts. and is a fair centre for excursions.

Sugar Hill (1350 ft.; **Sunset Hill Ho.*, $ 4, 3/4 M. from the village; *Hotel Look Off*, 1/4 M. farther on, from $ 3, etc.), 2 1/2 M. to the S.W. of Franconia and 6 M. from the railway-station of Sugar Hill (p. 318; daily stages), is another favourite resort. Superb *View from the summit of the ridge (1780 ft.) from which the village takes its name, including the Franconia Mts. and the Presidential Range to the E. and the Green Mts. (p. 310) to the W. The Sunset Hill House has a small golf course.

h. Jefferson.

Jefferson (1440 ft.; **Waumbek*, from $ 4; *Grand View Ho.*, $ 2-2 1/2), situated on a spur of *Mt. Starr King*, above the *Israel River*, is a station on the Boston & Maine R. R. and lies about 2 M. from Bailey's Station on the Maine Central line (p. 305; hotel-omnibuses to meet the trains), 12 M. to the N. of Fabyan's, and 17 M. to the W. of Gorham (comp. p. 325). Along the road running to the S.E. from Jefferson to (4 M.) *Jefferson Highlands* (station, p. 303) and (5 M.) the *Mt. Adams Ho.* ($ 2; comp. Map) are several comfortable boarding-houses (Cold Spring Ho., Pliny Range Ho., Highland Ho., etc.), all commanding fine general views of the White Mts.

Mt. Starr King (3915 ft.), the southernmost summit of the *Pilot Range*, is ascended by a well-marked path from the Waumbek Hotel in 1 1/2-2 1/4 hrs. The *View embraces the White Mts., the Franconia Mts., the Green Mts., the valley of the Connecticut, and the Pilot Mts. (to the N.). — **Owl's Head** (3270 ft.; *View) may be ascended from Cherry Mt. Station (p. 303), by Stanley's Slide (toll 25 c.) in 1 1/2 hr. *Bray Hill* (1640 ft.), an eminence 4 M. to the S.W. of Jefferson, affords a good view.

Among the chief excursions from the Mt. Adams House (which is near Boy Mountain station, p. 303) are the walks by the so-called *Castelluted Ridge* path to (7 M.) Jefferson and that to the S.E. to (5 M.) *Cascade Camp*.

The *Drive from Jefferson to (17 M.) *Gorham* (comp. p. 325) or (19 M.) the *Glen House* affords a splendid, unimpeded *View of the N. side of the Presidential Range; and that to (18 M.) the *Crawford House* (p. 325), either viâ the Cherry Mt. Road or through the Jefferson Notch (comp. p. 325), is also fine. Other favourite drives are the rounds viâ *Stag Hollow* and the *Valley Road* (9 M.), and viâ *Blair's Mills*, the *Valley Road*, and *Cherry Mt. Road* (18 M.). *Lancaster* (p. 305) is 7 M. to the W.N.W.

i. Mount Washington.

Mt. Washington (6293 ft.), the highest mountain in the United States to the E. of the Rockies and N. of N. Carolina, deserves its rank as monarch of the White Mts. as much for the grandeur of its form as for its height. On the N. and E. it is furrowed by several huge ravines, of which Tuckerman's (see p. 333) is the best-known.

The group of buildings at the top includes the **Summit House**, a comfortable inn in which the night may be spent ($ 5 a day, $ 25 a week; meal or bed $ 1½); a disused *U. S. Signal Service Station;* the office of '*Among the Clouds*', a daily paper published here in summer; the old *Tip-Top House;* stables; an engine-house, etc. The summit is now annually visited by about 10,000 people. Warm clothing should be brought, as even at midsummer the temperature is very low (30-50°). A temperature of 60° below zero has been observed in winter.

Botanists will find much to interest them in the flora of Mt. Washington, the plants on and near the summit being identical with those of the Arctic Circle. The happiest hunting-ground is the so-called '*Alpine Garden*', a terrace to the E. of and below the cone. See the *Geology of New Hampshire.*

The ordinary starting-points for the ascent of Mt. Washington are the Fabyan House, the Crawford House, and the Glen House, while the route over the Northern Peaks (p. 333) is a favourite one with tried pedestrians. Travellers should ascend one way and descend another. The routes from the E. side (p. 332) are, perhaps, the finest. A good walker can ascend from the Crawford House and descend to the Glen House in one long day.

The **View from Mt. Washington is one of the finest and most extensive in the Eastern States, reaching into Canada on the N. It is particularly grand at sunrise or sunset, but the summit is sometimes swathed in mist or clouds for days at a time. The atmospheric phenomena are often very interesting.

View. To the N., across the 'Great Gulf', rise Mts. Clay, Jefferson, Adams, and Madison; a little farther to the right are Mt. Hayes and the Androscoggin Valley. Gorham is hidden by Pine Mt. To the N. E. we look over the deep valley in which the Glen House lies to Mt. Moriah, to the right of which follow Mt. Carter, the Carter Dome, Carter Notch, and Mt. Wild-Cat. In the distance, towards the N. E., are the Rangeley Lakes and mountains on the Canadian border. To the E. we see Baldface Pleasant Dome (with its hotel), and other lower mountains, in the State of Maine. To the S. E. are the pyramidal Mt. Kearsarge and other hills round North Conway, with the Ellis River flowing down to join the Saco. Directly below us is Tuckerman's Ravine. Lake Sebago is also seen, while Portland and the ocean are visible on a clear morning. To the S. are Ossipee Lake and Lake Winnipesaukee, with Mt. Chocorua between them, while more in the foreground are the Giant's Stairs and Mt. Webster, rising over the White Mt. Notch. The stream seen here is the Mt. Washington River. On the other side of the Notch (S. W.) rise Mts. Nancy, Carrigain, Willey, and Field, while Mt. Moosilauke appears on the horizon a little more to the right. The Lakes of the Clouds lie below Mt. Monroe, in the S. W. foreground. To the S. of W. the finely-shaped Mt. Lafayette is seen among the other Franconia Mts.; while almost due W. opens the valley of the Ammonoosuc (with the Mt. Washington and Fabyan Hotels), with the Green Mts. and even the Adirondacks visible in the distance. To the N. W. are Cherry Pond, Jefferson, and the Israel River, with Mt. Starr King and the Percy Peaks in the distance. The most distant points said to be visible in exceptionally favourable weather are Mt. Beloeil (p. 315), 135 M. to the N. W.; Mt. Wachusett, 126 M., and Mt. Monadnock (see p. 309), 104 M. to the W. of S.; and Mt. Whiteface (p. 111), 130 M. to the W.

Ascent of Mt. Washington by Railway. A branch-line runs from the Fabyan House (p. 327) viâ Bretton Woods (p. 326) to

(6 M.) *Marshfield* or *Ammonoosuc*, generally known as the *Base Station* (2670 ft.), the starting-point of the **Mt. Washington Railway**, which was constructed on the cog-wheel principle in 1866-69 (before the Rigi Railway) and ascends on the W. side of the mountain. The distance to the summit (3 1/10 M.) is accomplished in 1 1/4 hr. (return-fare $ 4); the average gradient is 1:4, the maximum gradient 1:2 2/3. The season begins in July, and two or more trains run daily. This is by far the most frequented ascent.

The train ascends steeply through wood. 3/4 M. *Cold Spring*. Beyond (1 M.) *Waumbek Junction* (3910 ft.; water-station) the trees become thinner. At *Jacob's Ladder* (5470 ft.; water-tank), a long trestle-work, 30 ft. high in the middle, the gradient is at its steepest. We now pass the forest line and enjoy fine views. To the left are the 'humps' of *Mt. Clay*, with the 'Great Gulf' yawning below them and the peaks of Mts. Jefferson and Adams above. From the (2 1/4 M.) *Gulf Tank* (5800 ft.) to the summit the ascent is easier. We see the carriage-road to the left, and pass the monument (right) erected on the spot where Miss Bourne died of exhaustion in 1855. 3 1/10 M. *The Summit House* (p. 331). — When the trains are running walkers are not allowed on the track, but in winter it forms the best footpath to the summit from this side.

Special combination railway and stage tickets, good for 5 days, are issued, allowing passengers to start in the morning from the Profile House, Bethlehem, Jefferson, Jackson, North Conway, or other points to the W. of the Presidential Range, ascend Mt. Washington by railway, and descend on the other side by coach (*Glen & Mt. Washington Stage Co.*) to Glen House and Glen Station (p. 305), whence they regain their starting-point by train. Fabyan is left at 9.20 a.m., the summit at 1 p.m., Glen Station at 6.32 p.m. — Fabyan is regained at 7.55 p.m. (Bethlehem 9 p.m., Profile House 9.10 p.m.). Round-trip fare from Fabyan $9.75, from Profile Ho. $11.25, from other places in proportion.

Ascent from the E. Side. An excellent carriage-road (average gradient 1:8) was constructed from the Glen House (p. 323) to (8 1/2 M.) the *Summit House* in 1855-1861, and mountain-carriages ascend by this route from Gorham and from Jackson in ca. 5 hrs. (return-fare $ 8 each, incl. toll; descent $ 3). Toll for foot-passengers 16c. — Walkers may also ascend from the Pinkham Notch viâ *Tuckerman's Ravine* (A. M. C. path) in 4 1/2-6 hrs. or by the Glen Boulder Path (A. M. C.) starting near the Glen Ellis Falls, in 6-7 hrs.

a. By Road. From the Glen House the road at first ascends rapidly through wood, and 2 M. up is joined by the abandoned road mentioned at p. 323. 3 1/2 M. *Halfway House* (3840 ft.). At (4 M.) the *Ledge* we emerge from the trees and obtain a fine View of the 'Great Gulf', with the other peaks of the Presidential Range beyond it. The road now ascends, less steeply, along the edge of the Great Gulf. It then turns sharply to the left (S.S.E.) and ascends along a shoulder, making another loop to the right ('Cape Horn') farther up (Views). The final ascent of the cone is steep.

b. On Foot through Tuckerman's Ravine (4-5 hrs.; a fatiguing route, but guide not necessary for mountaineers). We reach the ravine either by an A. M. C. footpath from the *Crystal Cascade* (p. 323), or by the

Raymond Path (A. M. C.), diverging to the left from the Mt. Washington road, 2 M. from the Glen House (sign-post), and joining (2¼ M.) the Crystal Cascade path.

*Tuckerman's Ravine is a huge 'corrie' on the S.E. side of Mt. Washington, enclosed by towering rocky walls 1000 ft. high. Following the Appalachian path from the Crystal Cascade, through wood, we reach the (1½ M.) *Hermit Lake* (3650 ft., A. M. C. camp), a small tarn, commanding magnificent views. A rough walk of ¾ M. (½-¾ hr.) brings us hence to the **Snow Arch*, in the ravine proper, formed by the stream flowing under the huge masses of snow piled up here in winter. The arch, which is generally to be seen till August, should not be approached too closely, as falls of heavy masses of snow are frequent. From the Snow Arch we may reach the summit by a hard climb of 1-1½ hr.; the route is marked by cairns and by white paint on the rocks. Tuckerman's Ravine is often visited as an excursion from the Summit House (there and back 3 hrs.); the descent to the Glen House takes 3-3½ hrs. (view best in descending).

ASCENT FROM THE CRAWFORD HOUSE (5-6 hrs.). For experienced climbers a guide is unnecessary in clear weather, but novices should not attempt it alone; in stormy weather it is impossible to be too cautious. At least four fatal accidents have occured. The views are very extensive.

The path begins to the E. of the Crawford House and ascends through wood on the W. side of Mt. Clinton (to the left the path to *Gibbs Falls*, p. 326). In 1¾-2 hrs. we reach the summit of **Mt. Clinton** (4275 ft.; view) and have behind us the worst part of the route. The path now leads along a ridge to the N.E., descends about 270 ft., and then re-ascends. The regular path leads to the right over the S.E. shoulder of **Pleasant Dome** (4775 ft.; small 'castle' at the top), but a less distinct trail to the left leads to the (¾-1 hr.) top (*View), near which the footpath from the Pleasant Ho. comes in (see below). We now descend in the same general direction to the *Red Pond*, on the plateau (4400 ft.) between Pleasant Dome and Mt. Franklin. To the right, beyond the pond, is *Oakes Gulf* (3000 ft.; care necessary here in foggy weather). **Mt. Franklin** (5028 ft.), reached in ¾ 1 hr. from Pleasant Dome, is another good point of view. Between Mt. Franklin and Mt. Monroe the path runs along a ridge, without much change of level. It leads round the S. peak of Mt. Monroe and bends to the N. To the E. is *Boott's Spur* (5520 ft.), to the left the small *Lakes of the Clouds* (5050 ft.). ¾-1 hr. **Mt. Monroe** (5390 ft.) reached by a détour of ½ hr. from the main path, commands one of the best near views of Mt. Washington. The path next passes (½ hr.) the gap (5100 ft.) between Mt. Monroe and Mt. Washington (*A. M. C. Refuge Hut*, without night-quarters), and ascends over the rocky ledges on the S. side of the latter (the last part, up the cone, steep; numerous cairns) to (1-1½ hr.) the top of *Mt. Washington* (p. 331).

ASCENT FROM THE MT. PLEASANT HOUSE (4¾-5½ hrs.).

This path starts at *Barron's Camps* on the *Abenaki Brook*, on a wood-road leading E. from the new road connecting Crawford's with Jefferson, follows an old 'logging road' for some distance, and ascends the W. side of *Pleasant Dome*, near the (1½-2 hrs.) top of which it joins the Crawford Path (see above).

ROUTE OVER THE NORTHERN PEAKS (1-1½ day, with guide).

The *Walk over Mts. Madison, Adams, Jefferson, and Clay to the summit of Mt. Washington forms a fine but trying excursion for good mountaineers with trustworthy guides. It is possible to do it in one long day, but it is preferable to take two days and pass the night in the *Madison Spring Hut* of the Appalachian Mt. Club (4825 ft.; open to all; telephone).

The *Views are very grand. **Mt. Madison** (5380 ft.) may be ascended on the N. side by the so-called 'Valley Way', beginning at Appalachia, 6½ M. to the W. of Gorham (comp. p. 325), and leading to (3⅝ M.) the *Madison Spring Hut* (see above), in the depression between Mt. Madison and Mt. Adams, whence the summit is reached in ½ hr. more (path difficult to

find, though marked by a few small cairns). We then return to the Hut, follow the Gulfside trail to (20 min.) the Air Line Path, and ascend by the latter to (1/2-3/4 hr.) the top of **Mt. Adams** (5805 ft.). We next descend by Lowe's Path (p. 325) and Israel Ridge Path to the (20 min.) Gulfside trail and follow the latter across the shoulder of **Mt. Jefferson** (5725 ft.), the (1 1/2 hr.) top of which, reached by a short scramble to the left, affords a fine *View of Mt. Washington. Between Mt. Jefferson and (1 hr.) **Mt. Clay** (5554 ft.) the Gulfside trail descends 735 ft. Beyond Mt. Clay it descends to (3/4 hr.) the Mt. Washington carriage-road, 1/4 M. below the summit of *Mt. Washington* (p. 331). — Mt. Madison may also be ascended from the Glen House (p. 323) by the Osgood Path in 5-6 hrs. (hard climbing). For Mt. Adams and Mt. Jefferson, comp. p. 325.

44. From Boston to Albany.

Comp. Map, p. 232.

a. By Boston & Albany Railroad.

201 M. Railway in 5 1/2-7 1/2 hrs. (fare $ 3.80; parlor-car $ 1, sleeper $ 1.50). To (39 M.) *Saratoga* in 1 1/4 hr. more. Through-trains run by this route to *St. Louis*, *Chicago*, *Cincinnati*, etc.

From Boston to (98 M.) *Springfield*, see R. 30a. The line to New York diverges here to the left (S.), while our line crosses the *Connecticut* and runs nearly due W. through the valley of the *Westfield River*. 108 M. *Westfield*, with manufactures of whips and cigars. The hills grow higher. 119 M. *Huntington* (400 ft.). Beyond (126 M.) *Chester* (620 ft.) the line climbs rapidly through a rocky and wooded valley, contracting at places to a wild ravine. Numerous small lakes. Near (134 M.) *Becket* (1200 ft.; Claflin Ho., $ 2) we reach the flat top of the *Hoosac Range* (ca. 1400 ft.), and farther on we begin to descend again into the *Berkshire Valley*. For a description of the *Berkshire Hills*, see R. 46. The descent to (145 M.) *Dalton* (1050 ft.; *Irving Ho., $ 2-3), with large paper-mills, is rapid and the scenery picturesque. Beyond it we cross the *Housatonic River*. — 151 M. **Pittsfield** (1010 ft.), junction of the Berkshire Division of the N. Y. N. H. & H. R. R., see p. 341.

From Pittsfield to North Adams, 21 M., railway in 3/4 hr. (fare 40c.). — 11 M. *Cheshire;* 13 1/2 M. *Cheshire Harbor*, the starting-point of a path to the top of Greylock (p. 343). — 16 M. *Adams* (The Barret, from $ 2), with a statue of President McKinley (1843-1901), by Augustus Lukeman, is the nearest station to Greylock, which is ascended hence by a road joining the just-mentioned path from Cheshire Harbor. — 21 M. *North Adams*, also connected with Pittsfield by electric tramway (comp. p. 342).

To the N. (right), at some distance, rises the double-peaked Greylock (p. 343). The train now crosses the Housatonic, turns to the left (S.), passes (154 M.) *West Pittsfield* (with a settlement of Shakers), and at (162 M.) *State Line* enters the *State of New York*. We leave the Berkshire Valley by crossing the *Taghkanic* or *Taconic Range* (ca. 2000 ft.) and then traverse an undulating wooded district. 177 M. *Chatham*, the junction of lines to Hudson (p. 88), Lebanon Springs (p. 342), and New York (comp. p. 74); 185 M. *Niverville*, with a

fine park, much resorted to from Albany (comp. p. 88). Farther on we see the *Hudson* to the left, and beyond (200 M.) *Rensselaer* we cross it by a fine bridge (view).

201 M. **Albany**, see p. 91.

b. Viâ the Hoosac Tunnel.

199 M. Fitchburg Railroad to (191 M.) *Troy* in 5½-8 hrs.; New York Central or Delaware and Hudson River Railroad thence to (8 M.) *Albany* in ⅓-½ hr. (fares as at p. 334). *Saratoga* (p. 119) is reached by this line, viâ *Johnsonville*, in 6½-8 hrs. Through-trains run to the Western cities. The line skirts the N. margin of the *Berkshire Hills* (R. 46; views to the left).

From Boston to (60 M.) *South Ashburnham*, see pp. 306-309. At (65 M.) *Gardner* (4,000,000 chairs made here yearly) we cross the branch from Worcester (p. 240) to (16 M.) *Princeton* and (37 M.) *Winchendon* (see p. 309).

From (82 M.) *Athol* a branch of the Boston & Albany R. R. runs to Springfield (p. 239). Beyond (97 M.) *Miller's Falls* we see *Mt. Toby* (1275 ft.) to the left and *Lake Pleasant* (a great summer-resort of Spiritualists) to the right. We then cross the *Connecticut* and the *Deerfield* and reach (105 M.) **Greenfield** *(Weldon*, from $ 2½; *Mansion Ho., Devens*, $ 2½-4; *Rail. Restaurant)*, a favourite summer-resort and the junction of the Conn. River Division of the B. & M. R. R. Excursions may be made hence to (3 M.) *Deerfield* (p. 345), to *Turner's Falls* (4½ M.), to the *Coleraine*, *Leyden*, and *Shelburne Gorges*, to *Springfield* (p. 239; electric tramway), etc.

The train now follows the pretty valley of the Deerfield, with *Arthur's Seat* (930 ft.; r.), and beyond the **Deerfield Gorge* reaches (119 M.) *Shelburne Falls* (Hotel, $ 2), where the river descends 150 ft. in two or three distinct falls. To the N. (r.) of (128 M.) *Charlemont* rises *Pocomtuck Mt.* (1890 ft.). We cross the stream and farther on penetrate the *Hoosac Range* (2400 ft.) by the (135 M.) **Hoosac Tunnel** (765 ft.), which is 4¾ M. long (transit of 9 min.; Simplon Tunnel 12¼ M.) and was made in 1855-74 at a cost of $ 20,000,000 (4,000,000*l.*). It is the longest tunnel in the United States.

143 M. *North Adams*, see p. 342. The train descends the valley of the Hoosic. To the left rises *Greylock* (p. 343), to the right *East Mt.* (2200 ft.). 148 M. *Williamstown*, see p. 343. We turn to the N.W. (right), cross a corner of *Vermont*, and enter *New York State*. 164 M. *Hoosick Falls* (Phœnix; trolley to Bennington, p. 129, 17 M.); 166 M. *Hoosick Junction*, for a branch-line to (11 M.) Bennington and (68 M.) Rutland (see p. 129).

Near (175 M.) *Johnsonville* are the picturesque *Falls of the Battenkil*. The railway forks here, the left branch leading to Troy (see below), and the right to (189 M.) *Mechanicville* (p. 127) and (212 M.) *Rotterdam Junction* (p. 139).

From (188 M.) *East Saratoga Junction*, on the latter branch, a line runs to (18 M.) *Saratoga* (p. 119).

191 M. **Troy**, see p. 128. Thence to (199 M.) **Albany**, see R. 11 b.

45. From New York to Pittsfield *(Berkshire Hills)*.

Comp. Map, p. 232.

157 M. New York, New Haven, and Hartford Railroad in 4-6 hrs. (fare $ 3.25; parlor-car $ 1).

From New York to (41½ M.) *South Norwalk*, see R. 30a. The Danbury Division of the N. Y. N. H. & H. R. R. here diverges to the left from the main line and ascends along the *Norwalk River*, traversing a pretty wooded country, becoming hillier as we proceed. 43 M. *Norwalk* (p. 235); 49 M. *Wilton;* 54 M. *Branchville* (340 ft.), the junction of a short line to *Ridgefield* (800 ft.), the birthplace of 'Peter Parley' (S. G. Goodrich; 1793-1860); 59 M. *Redding*, the birthplace of Joel Barlow (1754-1812), author of the 'Columbiad'. — 62 M. *Bethel*, a prosperous little place with 2560 inhabitants.

The Litchfield Branch Railroad runs from Bethel to (38 M.) Litchfield (1200 ft.; *Hawkhurst*, $ 3-4; *U. S. Hotel*, $ 2½-3), a summer-resort in a pretty, hilly district, near *Bantam Lake* (hotel, $ 2-2½). Pop. (1900) 3000. It was the birthplace of *Henry Ward Beecher* (1813-87; p. 76) and *Mrs. Beecher Stowe* (1812-96; p. 239).

65 M. **Danbury** (*Walmac*, *Greene*, *Fairfield*, $ 2-2½), a town of 19,474 inhab., with large hat-factories, is the junction of the New England R. R. (p. 239). — At (71 M.) *Brookfield Junction* (340 ft.) we pass on to the Berkshire Division of the railway and are joined by the line from New Haven and Bridgeport. The hills now 'begin to show mountainous symptoms'. At (73 M.) *Brookfield* the *Housatonic*, the beautiful valley of which we henceforth follow, comes into view on the right. To the left is the *Still River*. We cross the Housatonic as we near (81 M.) *New Milford* (New England Ho., Wayside Inn, $ 2-2½), and thereafter have it to the left. Above (94 M.) *Kent*, a prettily situated village, the valley contracts. 103 M. *Cornwall Bridge*. To the left rises the *Sharon Ridge* (1500 ft.). — 113½ M. *Falls Village* (550 ft.; Falls Village Inn, $ 2-3), near the **Falls of the Housatonic* (130 ft.). A coach runs hence to *Salisbury*. To the left (2½ M.) is *Mt. Prospect* (1475 ft.; good view). — 119 M. *Canaan* (670 ft.; Canfield Inn, $ 2½), a good centre for excursions.

Canaan Mt. (1500 ft.), 1 M. to the S.E., affords a view of the Housatonic Valley, the Twin Lakes, and the Berkshire Hills (R. 46). The *Twin Lakes* (see below) lie 1½ M. to the W. Excursions may also be made to *Campbell's Falls* (7½ M.), *Sage's Ravine* (7 M.; p. 338), etc.

Canaan is also a station on the Central New England R. R., which runs hence to the S.E. to *Norfolk* and *Winsted* and to the S.W. to *Twin Lakes*, *Lakeville*, and *State Line* (p. 334), all pleasant resorts.

We now pass from Connecticut into *Massachusetts* and enter the district of the *Berkshire Hills* proper (R. 46).

The *Taghkanic* or *Taconic Mts.* rise to the left, and the *Hoosac Range* to the right. Beyond (122 M.) *Ashley Falls* we cross the Housatonic. 126 M. *Sheffield* (p. 337); 129½ M. **Great Barrington** (p. 338). — 134 M. *Van Deusenville* is the junction of a line to *West Stockbridge*, *State Line*, and *Albany* (p. 91). *Monument Mt.* (p. 340)

Electric Street Railway
State Reservation Boundary
Petersburg Jc.
Williamstown
Petersburg Jc.
Natural Brid
NORTH ADAM
B.&M.R.R.
Blackinton
Berlin Pass
2190
Berlin
Barber Holl
Kendall Pond
Mc Master H.
Berlin Mt
2884
Sweets Corner
Greylock
Braytonville
Mt Williams
2600
3020
Prospect Mt
Berlin Center
Long Pond
Rocky Hill
South Williamstown
Stony Ledge
View Tower
Bound Pd.
South Berlin
Mattison Holl
Mt Misery
2427
South Mt
2200
Mt Greylock
Buck Rock
Adams
3240
Saddle Ball
Butternut Hill
North Stephentown
New Ashford
Arnoldsville
Maple Grove
Sugar Loaf
Rounds Rock
2560
Pinnacle
Cheshire Harbor
Buckwheat Hill
1743
Station
2418
Bound Mt
East Mountain
1908
Pratt Hill
Cheshire
Mt Amos
Stephentown Center
Stephentown
Potter Mt
2400
Hancock
Farnam
Taplins Pd.
Garfield
Savage R.
Constitution Hill
Farnam H.
North Mt
Lanesboro
Berkshire
Tower Mt
2185
Promised Land
Pontoosuc Lake
Pontoosuc
The Gulf
Lebanon Springs
Coltsville
Mountains
Hoosac

Wagner & Debes Geog. Estab. Leipzig

THE BERKSHIRE HILLS

0 1 2 3 4 5 6 Statute Miles — 1 : 316.800 (5 Miles to an Inch) — 0 2 4 6 8 10 Kilometres

rises to the right. — 136 M. *Housatonic;* 139 M. *Glendale.* We cross the river once more and bend to the right (E.). — 140½ M. **Stockbridge** (p. 339). We cross the Housatonic several times. 142 M. *South Lee;* 146 M. *Lee* (comp. p. 340); 148½ M. *Lenox Dale.* At (150½ M.) *Lenox Station* omnibuses from (2½ M.) **Lenox** (p. 340) meet the trains, and there is also a tramway. 153 M. *New Lenox.* 157 M. **Pittsfield** (p. 341; *Rail. Restaurant*).

46. The Berkshire Hills.

The district known as the *Berkshire Hills, corresponding practically to *Berkshire County* (pop. 98,330 in 1905) in the W. part of Massachusetts, is 50 M. long from N. to S. and 20-25 M. wide from E. to W., covering an area of about 1300 sq. M. On the W. it is bounded by the Taconic Mts. and the State of New York; on the E. by the Hoosac Mts., a S. prolongation of the Green Mts.; on the S. by Connecticut; and on the N. by Vermont. The region confined between the two mountain-ranges is broken up into a number of smaller valleys, interspersed with isolated hills; and for the gentle loveliness of a hill-country, as contrasted with a mountain country, it is unsurpassed in the United States and has few rivals elsewhere. The *Hoosic* flows through the district towards the N. to join the Hudson, and the *Housatonic* flows S. towards Long Island Sound, while innumerable small lakes and brooks add to its attractions. The praises of the Berkshire Hills have been repeatedly sung by Longfellow, Bryant, Whittier, Hawthorne, Beecher, and others. — The name of the Taconic Mts. is well known in geology, as the non-fossiliferous Taconic formations are regarded as a distinct system, intermediate between the Archæan rocks and the Potsdam sandstone. — Perhaps the best Season to visit the Berkshires is in autumn, as the brilliant autumnal tints of the American woods are seen here to perfection. Fashion has decreed that the seaside sojourn at Newport should be followed ere returning to town by a 'fall' visit to the Berkshire Hills, and many people stay here till well on in November. *Lenox* (p. 340) is the most fashionable resort, but *Stockbridge* (p. 339), one of the loveliest villages in America, is perhaps an equally good tourist-centre; while *Pittsfield* (p. 341), *Great Barrington* (p. 338), and other places also form good headquarters. The *Hotels* are usually good and not exorbitant. The *Roads* are well-adapted for driving, motoring, and cycling. *Carriage Hire* is lower than at Newport or in the White Mts.

The Berkshire Street Railway (electric tramway) runs through the district from Great Barrington (p. 338) viâ (11 M.) Stockbridge (p. 339), Lenox Station (20 M.; p. 340), Pittsfield (28 M.; p. 341), Adams (43 M.; p. 334), North Adams (49 M.; p. 342), and (55 M.) Williamstown (p. 343) to (69 M.) Bennington (p. 129) and (86 M.) Hoosick Falls (p. 335). At Pittsfield and Cheshire (p. 334) this line connects with the Pittsfield Street Railway, which runs to Dalton, Hinsdale, Pontoosuc Lake, Lanesborough, and other points. These lines afford a pleasant route from point to point, and the fares are moderate.

Pittsfield is reached from *New York* in 4-6 hrs. (fare $ 3¼; see R. 45) and from *Boston* (see R. 44a) in 4½-5 hrs. (fare $ 3.40).

The S. half of the district has hitherto been the best known, and the following description enumerates the chief points in order from S. to N.

Sheffield (675 ft.; *Elmhurst*, $ 2-3; rail. stat., see p. 336), a quiet little village on the *Housatonic*, is known for its marble quarries, which supplied the material for Girard College (p. 169). Pop. (1905) 1782. Tobacco is largely grown in the neighbourhood. *Pine Knoll Park* is a public reservation.

Mt. Everett or **Washington** (2624 ft.; view), sometimes called the *Dome*, one of the highest of the *Taconic Mts.*, rises 5 M. to the W. and is frequently ascended hence (road to the base; path to the top 1/2 hr.). — The *Sheffield Elm*, mentioned in the 'Autocrat of the Breakfast Table', is 1 M. to the S. of the centre of the village. — Other pleasant points are *Bear's Den*, 1 M. to the W.; **Sage's Ravine*, 6 M. to the S.W.; *Twin Lakes*, 5 M. to the S.; the *Ashley Falls* (4 M.; p. 336); and the **Bashbish Falls*, 7 1/2 M. to the W.

From Sheffield we may proceed to the N., along the *Housatonic*, either by road (a pleasant drive) or railway, to (6 M.) —

Great Barrington (720 ft.; **Berkshire Inn*, Main St., $ 2 1/2-3; *The Barrington*, Berkshire Heights, from $ 3; *Miller Ho.*, $ 2-3; rail. stat., p. 336), beautifully situated in a hollow surrounded by hills, the slopes of which afford good views of the picturesquely spired town and the valley. Pop. (1905) 6152.

The railway-station lies to the W. of *Main Street*, shaded by fine elms, into which we turn to the S. (right). We pass the *Post Office* (l.) and the *Town Hall* (r.), and in a few minutes reach (r.) the *Episcopal Church*, built of blue limestone, and the large *Berkshire Inn*. Opposite, concealed by a massive stone wall and trees, is *Kellogg Terrace, a magnificent mansion of blue limestone, with red-tiled roofs, erected by the late Mrs. Hopkins-Searles, in a French Gothic style, at a cost of $ 1,500,000 (300,000*l.*). It is most elaborately fitted up (no admission). The **Grounds* contain a fine fountain (jet 80 ft. high). — The handsome *Congregational Church and the Hopkins Memorial Manse are on the same side of the street, a little to the N. of the Post Office. The former contains a magnificent organ (3954 pipes, 60 speaking stops) and an 'echo' organ, concealed in the walls and operated by 2 1/2 M. of electric wire. The parsonage is said to be the finest in the United States.

William Cullen Bryant (1794-1878), the poet, was for several years (1815-25) town-clerk of Great Barrington, and many of the town records are in his handwriting. His house (the old 'General Dwight Place') stood on the site occupied by the Berkshire Inn, but has been moved farther back and is now an annex of the hotel. *Dr. Samuel Hopkins*, the hero of Mrs. Stowe's 'Minister's Wooing', lived at Great Barrington for 25 years.

A few hundred yards to the N.W. of the station is the pretty little *Mansfield Pond*. The *Berkshire Heights* (980 ft.), 1 M. to the W. of the station, command a fine *View. About 1/2 M. to the S. is *Mt. Peter*, a good point of view. To the E., across the river, rise *Mt. Bryant* (1450 ft.) and *East Mt.* (1740 ft.). *Belcher's Cave* lies at the N. end of the village.

To the S.E. (5 M.) lies *Lake Buel*, in the hill on the W. side of which is the *Ice Gulf*, where ice is found nearly all summer. — *Long Lake* lies 3 M. to the N.W. — **Monument Mt.* (p. 340) is 4 1/2 M. to the N.

The direct road from Great Barrington to (8 M.) *Stockbridge* (railway, see p. 337) runs on the E. side of the *Housatonic*, with *Monument Mt.* to the left and *Bear Mt.* to the right (see p. 340).

The Electric Tramway from Great Barrington to Stockbridge (comp. p. 337) starts hourly at the Golf Grounds, to the S. of the town, and follows a somewhat circuitous route (11 M., in 50 min.; fare 15 c.).

Stockbridge (830 ft.; *Red Lion Inn*, $3; *Heaton Hall*, $4, same management, finely situated; boarding-houses), one of the most typical and charming of New England villages, with its immemorial elms and immaculate neatness, 'sleeps along a level plain just under the rim of the hills'. Pop. (1905) 2022.

In Main St., opposite the road leading to (1/2 M.) the railway station (p. 337), is the tasteful *Episcopal Church*, adjoining which is a *War Monument*. Following Main St. towards the left (W.), we pass, on the left, the *Sedgwick Mansion*, the old home of the Sedgwick family, built by Judge Theodore Sedgwick (1746-1813). To the right, nearly opposite, is the site of the house where *Jonathan Edwards* (1703-58) wrote his famous treatise on 'The Freedom of the Will'. A sun-dial indicates the location of his former study. Beyond this is the *Casino*, with tennis-courts, etc. Nearly opposite (left) is the *Congregational Church*, in front of which is a *Bell Tower*, erected by David Dudley Field to the memory of the Indian Mission and his deceased grandchildren. Also to the left is the entrance to the *Stockbridge Golf Links* (18 holes). The most interesting part of the *Cemetery* (right) is the enclosure of the Sedgwick family, with the grave of the authoress Catharine M. Sedgwick (1789-1867). The *Edwards Monument*, also to the right in Main St., was erected in 1871 by the descendants of Jonathan Edwards. To the left is the beautiful *Dwight Place*, beyond which, on the same side, is the *Old Burial Ground of the Stockbridge Indians*, with a monument (*View). The road diverging to the right at the Edwards Monument leads to a *Park*, given to the town by Cyrus W. Field (view).

In the part of Main Street to the E. of the Episcopal church is the *Jackson Library* (10,000 vols.; open to strangers), containing the table on which Jonathan Edwards wrote his 'Freedom of the Will'. A little farther on is the *Academy*, with *Laurel Hill* behind it.

To Ice Glen, 1 1/4 M. A pretty little concrete arch, thrown across the *Housatonic*, connects Laurel Hill (see above) with the slope of Bear Mt. From this bridge a broad path leads across the railroad track to the entrance of Ice Glen. It is crossed after 10 min. by a path to the left, which is to be avoided. *Ice or Icy Glen, a cleft in Bear Mt., is a wild, cold, and narrow rocky ravine, in the caverns of which ice may be found in midsummer and which forms a startling contrast to the surrounding scenery. At (15-20 min.) the upper end of the glen we pass through a gate into a pasture, across which we descend by a faint path to (5 min.) the road (gate here marked 'Path to Ice Glen'). Following the road to the right, we regain the station in 1/4 hr.

From Stockbridge to Monument Mt. (there and back 9-10 M., or 3-4 hrs.). From the Red Lion we descend Main St. to the left. The route bends to the left, passes the Indian Burial Ground (see above), and (2/3 M.) crosses the Housatonic. We then turn to the left and in a few hundred paces cross the railway. Avoiding the road to the right here, we continue in a straight direction to (3/4 M.) the cross-roads, where we keep to the left. The road soon dwindles to a lane and begins to ascend. 3/4 M. *Smith's Farm*, 325 ft. above Stockbridge (view). Here we should ask the way across the pasture, which ascends to the left to (8 min.) a gate leading into the wood. The route through the forest is by an old and winding cart-track, now seldom used for driving. In 20 min. it is joined by another

track from the right. A few yards beyond this, to the left, is a small patch of grass, with a slab of rock. A steep footpath ascends hence over rocks to (5-10 min.) the chaotic, rocky top of *Monument Mt. (1710 ft.), which commands a magnificent *View of the Housatonic Valley and the Berkshire Hills. The rock-formations (white quartz) are very fine, especially one huge detached pinnacle known as the 'Pulpit'. Ladies or others who object to scrambling should now return to the cart-track and either retrace their steps or follow it to the left to (25 min.) the Great Barrington road. A little time is saved, however, by descending the indistinct path on the other side of the summit, which merges (1/4 hr.) in a grassy wheel-track, that joins (3 min.) the above-mentioned cart-track about 10 min. from the Great Barrington road. Here we turn to the left for (3 3/4 M.) *Stockbridge*, a dusty highroad walk which we may avoid by having a carriage to meet us.

From Stockbridge to Lenox via Lake Mahkeenac and Bald Head, 8-9 M. We follow the road leaving Main St. at the Episcopal church and take the first road to the left. The road ascends *Prospect Hill* (*View of Stockbridge), passing Heaton Hall (p. 339), and for a mile or two is lined with handsome 'places'. To the right is *Rattlesnake Hill*. After about 3 M. we see the *Stockbridge Bowl or Lake Mahkeenac (ca. 920 ft.) below us to the left. At the (1 M.) fork near the N. end of the lake we follow the left branch ('to Lenox and Pittsfield'). At (3/4 M.) the next fork we again keep to the left, passing (on the lake, to the left) the scanty remains of the house in which Nathaniel Hawthorne lived in 1849-51, and wrote the 'House of the Seven Gables' and other works. 3/4 M. Opposite the pretty home of Mr. Higginson, we take the central of three roads (driving to this point advisable in hot or dusty weather), and immediately afterwards follow the road to the left between two private roads. A very little farther on we ascend to the right by a steep lane. In 20-30 min. we see the bare grassy top of Bald Head or *Mt. Prospect* (1583 ft.) to the right, which we reach by crossing the fence and grass to (5 min.) the cairn. *View to N. and S., including Lenox, the Stockbridge Bowl, and Monument Mt. We may now return to the lane and follow it round a wooded hill and down to (2 1/2 M.) Lenox. Or we may descend the cart-track in the hollow between Bald Head and the wooded summit to the N., which leads toward Lenox but soon dwindles to a trail and finally disappears (this route not advisable for ladies or elderly people). At (10-15 min.) the foot of the hill we emerge from the wood on a field, where we climb the fence and continue in the general direction of (1 1/2 M.) Lenox, which is seen in front. There are so many private roads here, that it is impossible to give precise directions, but it is scarcely possible to go far wrong. *Lenox*, see below.

From Stockbridge to Lenox Station by Electric Tramway (comp. p. 337), 10 M., in 37 min. (starting hourly; fare 20 c.). From the station a branch-line runs to (2 M.) the village. The chief intermediate station is (1/2 M.) East Lee (865 ft.; *Greenock Inn*, $ 4; *Morgan Ho.*, $ 2), a village with paper-mills and quarries of marble (used for the Capitol at Washington, etc.). Pop. (1905) 3972. A fine drive may be taken through the *Hopbrook Valley* to *Fernside* (1160 ft.; now owned by a club), *Tyringham*, and *Monterey* (12 M.). — *Lenox*, see below.

Excursions are also made from Stockbridge to *Mohawk Lake*, 2 3/4 M. to the W.; *Lake Averic*, 3 M. to the N.W.; *Eldon's Cave*, in *Tom Ball Mt.*, 3 1/2 M. to the W.; over the old *Burgoyne Road* (*Bear Mt.*; views); *Great Barrington* (8 M.); *West Stockbridge* (5 M.), etc.

Lenox (1270 ft.; *Aspinwall*, with splendid view; *Curtis Hotel*, $ 3-5, open all the year round; numerous boarding-houses), beautifully situated on a ridge, 2 1/2 M. to the W. of the railway-station (p. 337) and 6 M. to the N. of Stockbridge, is the Newport of the Berkshires and makes an even greater impression of wealth and luxury than the real Newport. Pop. (1905) 3058. The main street,

shaded with elms, contains the hotels, a *Club*, and a *Public Library*, while the slopes and crests of the surrounding hills are covered with large and often beautiful country-houses. Driving, riding, golf, and lawn tennis are the favourite amusements; horse races are held in the Lee Pleasure Park, and the annual 'Tub Parade' (of carriages) is a regular institution. *Fanny Kemble* (1811-93) and *Henry Ward Beecher* (p. 336) are among the most famous of former Lenox residents. In front of the Curtis Hotel is a statue of *General John Paterson* (1744-1808).

The best way to see Lenox is to hire a carriage, and spend 2-3 hrs. in driving about the network of excellent private roads (open to light vehicles only) of which the place consists. The *William Sloane* and *Lanier Places* adjoin each other and command a superb *View. Perhaps the finest grounds are those of the *Rathbone Place*, now owned by *Mr. John Sloane*. The *Westinghouse Place* has drives and walks of powdered marble. The *Stokes House* is built round a tree. The *Foster Mansion*, by Thos. Hastings of New York, is an imposing Renaissance structure of white marble and red brick. The *Perch*, the home of Fanny Kemble (see above), still stands opposite the Foster Mansion.

The Drives and Walks round Lenox are very attractive. Among the favourite excursions are those to the top of *Bald Head* (2½ M.; p. 340); the *Stockbridge Bowl* (2½ M.; p. 340) and *Stockbridge* (6 M.; p. 339); *Laurel Lake* (Laurel Lake Inn, $ 2) and the *Highlawn Farm*, a famous horse-breeding establishment, 2¾ M. to the S.E.; *North Lenox Mt.* and *Yokun's Seat* (2080 ft.; named after a chief of the Lenox Indians), 4-4½ M. to the N.W.; *Pittsfield* (6 M.; see below); the settlement of the *Lebanon Shakers* (p. 342) and *Perry Peak* (2060 ft.; view), 9 M. to the N.W.; *October Mt.*, 4 M. to the N.E. *Richmond*, 4½ M. to the W., is celebrated for its parallel trains of boulders, described by Sir Chas. Lyell. Short walks may be taken to (¾ M.) the *Ledge*, the (1 M.) *Pinnacle*, the *Lily Pond* (1½ M.), the *Schermerhorn Woods*, etc.

Electric Tramway from Lenox Station to Pittsfield (comp. p. 337), 7 M. (in 25 min.), starting every ½ hr. (fare 15 c.).

Pittsfield (1010 ft.; **Maplewood*, North St., $ 3-5; **The Wendell*, from $ 3, R. from $ 1½; *American Ho.*, open all the year, $ 2-3; *Beach Grove*, from $ 2; *Rail. Restaurant*), the chief city of Berkshire County, with (1905) 25,000 inhab., is finely situated on a plateau surrounded by hills. It was named in 1761 in honour of the elder Pitt. It is an excellent centre for automobiling and is one of the American headquarters of ballooning.

The public green in the centre of the city, named the 'Heart of Berkshire', bears the original statue of the *Massachusetts Colour Bearer*, by Launt Thompson, which has been reproduced at Gettysburg (p. 196). Among the buildings round or near the green are two *Churches*, the white marble *Court House*, and the *Berkshire Athenaeum* (with the *Berkshire Historical Society* and a public library of 50,000 vols.). The *Bishop Training School for Nurses* the *House of Mercy*, the *Old Ladies' Home Museum of Natural History and Art*, and the small *R. C. Cathedral of St. Joseph* may also be mentioned. Among the many interesting and attractive private residences are the *Appleton* or *Plunkett House*, in East St., where Longfellow wrote 'The Old Clock on the Stairs' (clock still in the house), and the quaint old *Kellogg Place*, also in East St. The

Cemetery contains fine old trees and a large red granite obelisk. — The *Stanley Electric Works* employ 3-4000 hands.

Oliver Wendell Holmes lived for some time at a small villa, 2 M. to the S., on the road to Lenox, and Pittsfield claims to be the scene of 'Elsie Venner'. *Herman Melville* lived at Arrowhead, also on the road to Lenox; and in the early days of the 19th cent. *Elkanah Watson*, the friend of Washington and Lafayette, occupied what is now the *Country Club*, surrounded by extensive and beautiful grounds. The *Rev. Dr. John Todd* (1800-1874), author of the well-known 'Lectures to Children', was long pastor of the Congregational Church. Electric cars traverse the principal streets.

About 2 M. to the W. of Pittsfield lies *Lake Onota*, passing the S. end of which, by the 'Interstate Road' across the *Taconic Mts.*, we reach (7 M.) **Lebanon Springs** (*Columbia Hall*, $ 3-4; *Taconic Inn*, $ 3), with waters useful in cutaneous and liver complaints. The Shaker village of *Lebanon* is 2 M. to the S. of the Springs (interesting Sunday services; meal at inn 75 c., advisable to telephone from Pittsfield). — *Pontoosuc Lake* (small steamers; boating), reached by electric car, lies 2¼ M. to the N. of Pittsfield, on the road to Williamstown (p. 343). *Lanesboro*, 2½ M. farther on, was the birthplace of 'Josh Billings' (H. W. Shaw; 1818-85; monument in graveyard). — On the slopes of the Taconic Mts., to the N.W. of Lake Onota, are the *Lulu Cascade* (4 M.) and *Berry Pond* (5 M.). — Among the 'Opes', or view-commanding vales, in this neighbourhood, is the '*Ope of Promise*', affording a view of the '*Promised Land*'. — The *Balance Rock* is 2 M. to the N. of Lake Onota and 2 M. to the W. of Pontoosuc Lake. — *South Mt.* (1360 ft.), 2 M. to the S., commands a view of Pittsfield, Lake Onota, Greylock, etc. — Other favourite points for excursions are *Potter Mt.* (2400 ft.), 8 M. to the N.W.; the *Wizard's Glen*, 4 M. to the N.E.; the *Wahconah Falls*, 8 M. to the N.E.; *Lake Ashley* (1920 ft.), 6 M. to the S.E.; *Perry Peak* (p. 341; 8 M.), etc. — A little to the N.E. of the city is the fine *Allen Stock Farm* (trotting-horses). — *Greylock* (p. 343) may be ascended by taking the electric tramway past Pontoosuc Lake and Lanesboro (see above) to (7 M. farther) *New Ashford* and then diverging to the right by a mountain-road passing round the back of the *Sugar Loaf* (2040 ft.; comp. Map).

Most of the roads are well provided with finger-posts.

The N. part of Berkshire County is much less known than the S., and there is no important centre for visitors between Pittsfield and North Adams and Williamstown, 20 M. to the N.

The Electric Tramway from Pittsfield to North Adams (21 M., in 1½-1¾ hr.; fare 30 c.) runs viâ *Berkshire* (alternative route viâ *Lanesboro*, see above), *Berkshire Park* (an amusement resort), *Cheshire*, *Cheshire Harbor*, and *Adams* (see p. 334).

North Adams (700 ft.; *Richmond*, from $ 2½, R. from $ 1; *Wellington*, R. from $ 1; *Wilson*, from $ 2½; *Berkshire*, from $ 2, R. from 75 c.), a manufacturing city in the narrow valley of the *Hoosic*, with (1905) 22,150 inhab., is a station on the Fitchburg Railroad (see p. 335) and the terminus of a branch of the Boston & Albany R.R. (see p. 334).

About 1 M. to the N.E. of North Adams is the *Natural Bridge*, a narrow rocky archway spanning the Hudson Brook at a height of 50-60 ft. — The W. end of the Hoosac Tunnel (p. 335) is 2 M. to the S.E. of N. Adams, and a favourite excursion is over the *Hoosac Mt.* (2270 ft.) to (9 M.) the E. end of the tunnel and *Hoosac Tunnel Station* (Rice's Hotel, $ 2).

Ascent of Greylock (8 M.; road), the highest mountain in Massachusetts, now kept as a State Reservation. We follow the Williamstown road (to the W.) for a short distance and then turn to the left into the road through the *Notch* (views), passing (1½ M.) the *Notch Brook Cascade*, 30 ft. high. About M. from N. Adams the road constructed by the *Greylock*

Park Association diverges to the right and leads through wood to (5 M.) the summit (easy gradient). About halfway up we have a view into the *Hopper* (1000 ft. deep). At the top are a view-tower (40 ft. high) and a small inn (telephone). The *View from Greylock (3505 ft.) includes Adams, N. Adams, Pittsfield, the valleys of the Hoosic and Housatonic, and most of the Berkshire Hills. Farther off are the Catskills to the S.W., the Green Mts. to the N., Mts. Monadnock and Wachusett to the E., and Mts. Tom and Holyoke to the S.E. — Greylock may also be ascended by a somewhat trying trail through the Hopper (p. 342). — The descent may be made on the S.E. side to *Cheshire Harbor* (p. 334) or on the S.W. to the road leading to *Lanesboro* (p. 342) and (15 M.) *Pittsfield* (p. 341).

The Electric Tramway from North Adams to Williamstown (6 M., in 1/2 hr.; fare 10 c.) runs viâ (5 M.) *Williamstown Junction.*

Williamstown (595 ft.; **Greylock*, $ 3-4, open in summer only; *Cosmo Ho.*, $ 2), 5 M. to the W. of N. Adams and 1 M. to the S. of the rail. station (p. 335; omn. 25 c.; electric tramway), lies on the *Green River*, an affluent of the Hoosic. Pop. (1905) 4425. It is the seat of *Williams College* (475 students; comp. p. 127), the buildings of which are the chief feature of the village. Among the most modern are the *Mark Hopkins Memorial Hall*, *Berkshire Hall*, *Clark Hall* (rebuilt in 1908), and the handsome *Thompson Memorial Chapel* (memorial window to President Garfield, a graduate of the college). The *President's House* and two of the *Fraternity Houses* (Delta Kappa Epsilon and Alpha Delta Phi) are good specimens of Colonial architecture. The old *Van Rensselaer Mansion* of Albany (comp. p. 92) has been re-erected here as the chapter-house of the Sigma Phi Fraternity. The streets are prettily laid out, without fences, and are shaded by fine trees.

In *Flora's Glen*, 1 M. to the W., Bryant is often, but erroneously, said to have composed his 'Thanatopsis', at the age of eighteen. — The **Hopper* (see above), a huge gorge enclosed by two spurs of Mt. Greylock, is 5 M. to the S. (best seen from *Stony Ledge*, to the W. of the path mentioned above). — The top of *Greylock* is 10 M. distant by the Greylock Park Road (see above). — The Taconic Range rises about 3 M. from Williamstown, and good views are afforded by *Mt. Belcher*, *Mt. Hopkins* (*Berlin Mt.*; 2804 ft.), and other summits. The chief passes over this range are the *Petersburg Pass* (2075 ft.), the *Berlin Pass* (2190 ft.), the *Kidder Pass* (bridle-path), and the *Johnson Pass*. — The *Snow Glen* is 7 M. to the N.W., 2 M. to the N. of the Petersburg Pass. — Among the favourite drives are the '*Short Oblong*' (2 M.) and the '*Long Oblong*' (10 M.).

From Williamstown Junction (see above) the Berkshire Street Railway (p. 337) runs on to (14 M.) *Bennington* (48 min.; p. 129; a beautiful ride) and (17 M.) *Hoosick Falls* (1 1/2 hr. more; p. 335), but both of these are beyond the limit of the present route.

47. From New York to Montreal viâ Connecticut Valley.

Comp. Map, p. 232, and R. 11.

450 M. New York, New Haven, & Hartford Railroad to (136 M.) *Springfield* in 3 1/2-4 1/2 hrs.; Connecticut & Passumpsic Division of the Boston & Maine R. R. thence to (50 M.) *South Vernon* in 1 1/4-2 hrs.; Central Vermont R. R. thence to (10 M.) *Brattleboro* in 1/3 hr.; Connecticut River

DIVISION OF THE B. & M. R. R. thence to (64 M.) *White River Junction* in 1¾ hr.; CENTRAL VERMONT R. R. thence to (163 M.) *St. John's* in 5-6 hrs.; GRAND TRUNK RAILWAY thence to (27 M.) *Montreal* in ¾-1 hr. (through-fare $ 10.65; sleeper from Springfield $ 2; express from New York to Montreal in 13¾-15½ hrs.). — Trains run to *Quebec* by this route (diverging at White River Junction) in 19-20 hrs. (fare $ 12). Through-trains run to *Fabyan's* in the White Mts. (R. 43) in 11 hrs. (fare $ 7; parlor-car $ 2).

From *New York* to (136 M.) *Springfield*, see R. 30a. We here join the *Connecticut & Passumpsic Division of the B. & M. R. R.*, which ascends the beautiful ***Valley of the Connecticut**, chiefly on the W. bank of the river (views mainly to the right; comp. 'The Connecticut River', by *E. M. Bacon*, 1906). 140 M. *Chicopee* (Columbian, Kendall, $ 2), an industrial town of (1900) 19,167 inhab.; with cotton-mills, a bronze-foundry, etc. *Chicopee Falls*, 2 M. to the E., also with cotton-mills, was the home of *Edward Bellamy* (d. 1898), author of 'Looking Backward' and 'Equality'. Tobacco is grown in this part of the valley. — The train crosses the *Chicopee River* on leaving Chicopee, and the Connecticut on entering (144 M.) **Holyoke** (95 ft.; *La France*, R. from $ 1), an industrial city with (1905) 49,934 inhab., possessing the greatest water-power in New England and said to be the chief paper-making place in the world (800 tons daily; value of manufactures in 1905, $ 30,731,332). The river has a fall of 60 ft. and is bridled by a huge dam, 1000 ft. across (30,000 horse-power). Canoeing is a favourite pastime here. From Holyoke a mountain-railway ascends to the top of *Mt. Tom* (1215 ft.; *View; see also p. 345). — Beyond (149 M.) *Smith's Ferry* we pass between Mt. Holyoke (see below) on the right and Mt. Tom (see above) on the left. From (151 M.) *Mt. Tom* a branch-line runs to (4 M.) *Easthampton*, a manufacturing town and the seat of *Williston Seminary*, a leading school in preparing boys for college. — We now pass the famous 'Ox Bow' of the Connecticut, which lies to the left and is no longer the main channel of the river.

153 M. **Northampton** (125 ft.; *Draper*, $ 2½-4; *Plymouth Inn*, $ 2½-3½; *Hampton House*, 2½-3), 'the frontispiece of the book of beauty which Nature opens wide in the valley of the Connecticut', is a lovely elm-shaded city of (1905) 19,957 inhab., on the W. bank of the Connecticut. It is widely known as an educational centre.

The chief of its educational institutions is SMITH COLLEGE, one of the leading colleges for women (1500 students). It possesses an art-gallery, a handsome library building, a music-hall, a gymnasium, a club-house for the students, etc. Other large buildings are *Memorial Hall* (with the Public Library), the *State Hospital for the Insane* (1 M. to the S.W.), the *High School* (1895), and the *Clarke Institution for the Deaf*. The last stands on *Round Hill*, which commands a good view of the town.

The chief of the numerous delightful excursions from Northampton is that to the top of *Mt. Holyoke (955 ft.; *Prospect Ho.*, at the top, $ 2½-3), 2 M. to the S.E. A carriage-road leads to a small mountain-railway which surmounts the last 600 ft. (return-fare $ 1; toll for walkers 50 c.). The exqui-

site *View from the summit includes the Connecticut Valley, the Hoosac Mts. and Greylock (W. and N.W.), Mt. Tom (S.W.), Springfield and the E. and W. Rocks at New Haven (S.; on an exceptionally clear day), Mt. Wachusett (E.), Amherst (p. 243) and Monadnock (N.E.), and the Green Mts. (N.). — *Mt. Nonotuck* (850 ft.), the N. peak of *Mt. Tom* (p. 341), is easily reached viâ Mt. Tom station (p. 344; *View). — Hadley (*Elmwood Ho.*, $ 2), a beautiful New England village, 2½ M. to the N.E. of Northampton, is celebrated for its magnificent *Avenue of elms (275 ft. wide). The regicide Whalley lived in concealment at Hadley for 15 years (1664-79). At *South Hadley*, 6 M. to the S., and connected with Holyoke by electric tramway, is the *Mt. Holyoke College for Girls* (730 pupils). — *Amherst* (p. 243) is 7 M. to the N.E. of Northampton. Both Hadley and Amherst are connected with Northampton by the Mass. Central R. R. (B. & M. system).

Beyond Northampton the train passes near the *Great Bend of the Connecticut* and then leaves the river. *Hadley* (see above) is seen to the right. 157 M. *Hatfield* (150 ft.). From (164 M.) *South Deerfield* (205 ft.) we may ascend *Sugar Loaf Mt.* (710 ft.), which rises to the right. *Mt. Toby* (p. 335) is on the opposite side of the river. A little farther on, to the right, is a monument marking the battlefield of *Bloody Brook*, where Capt. Lathrop and 80 young men, 'the flower of Essex Co.', were killed by Indians in 1675. — 169 M. *Deerfield* (220 ft.), a pretty village at the foot of *Deerfield Mt.* (700 ft.), with (1900) 1969 inhabitants. The building of the *Pocumtuck Valley Memorial Association* contains a collection of relics. — We cross the *Deerfield* and at (172 M.) *Greenfield* (p. 335) intersect the Fitchburg line. Beyond (179 M.) *Bernardston* the Connecticut again comes into sight on the right, and this part of the valley is very picturesque. Tobacco and maize are cultivated. 186 M. *South Vernon* is the junction of lines to Nashua (p. 313) and New London (p. 242).

196 M. **Brattleboro** (*Brooks Ho.*, $ 2½-4; *Brattleboro Hotel*, $ 2), a large village with (1900) 6640 inhab., charmingly situated on the W. bank of the Connecticut, is the centre of the maple-sugar industry of Vermont. It was the birthplace of Wm. M. Hunt (1824-79), the painter, and Richard M. Hunt (1828-95), the architect. The *Public Library* contains some natural history collections. The *Estey Organ Works* here turn out 20,000 organs yearly. In the *Cemetery* (view) is an elaborate monument to the notorious *Jim Fisk* (1835-72). A road ascends to the top of *Wantastiquet Mt.* (1364 ft.; view), on the opposite side of the river. Mr. Rudyard Kipling's American home lay 3 M. to the N. of Brattleboro. — 220 M. **Bellows Falls**, see p. 310. — We now cross to the E. bank of the river and leave Vermont for *New Hampshire*. Beyond (238 M.) *Claremont Junction* (line to *Concord*, see p. 314) we cross the deep gorge of the *Sugar River* by a bridge 105 ft. high. We recross the Connecticut River to (246 M.) *Windsor* (Windsor Ho., $ 2), the station for *Mt. Ascutney (3320 ft.; *Rfmt. Ho.*, at the top; *View).

260 M. **White River Junction** *(Rail. Restaurant)*, see p. 314.

Trains for *Quebec* and for *Montreal* viâ *Sherbrooke* part company from our route here and continue to follow the Connecticut Valley to *Wells River* (p. 317). The second station on this route is (5 M.) *Norwich*, whence omnibuses run to *Hanover* (Hanover Inn, $ 2½-4), ¾ M. to the S.E., the seat

of **Dartmouth College** (1270 students), the *alma mater* of Daniel Webster, George Ticknor, G. P. Marsh (p. 314), Thaddeus Stevens, Rufus Choate, and Chief-Justice Chase. *Dartmouth Hall*, a fine old Colonial building, was burned down in 1904 but at once rebuilt. The *College Park* is pretty, and its *Art Gallery* contains some interesting portraits. *Webster Hall* is an attractive Colonial auditorium, opened in 1907. On the E. bank of the river is a tablet to *John Ledyard* (1751-89), the traveller, who studied at Dartmouth College.

The train then crosses the *Ompompanoosuc*, passes (36 M.) *Newbury*, a pretty village in the *Ox Bow* 'intervales' of the Connecticut, and goes on to (40 M.) *Wells River*, where it joins R. 42 c.

For a description of our present route to (450 M.) **Montreal** (the shortest from this point), see pp. 314-316.

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48. From Pittsburg to Chicago.

a. Viâ Crestline and Fort Wayne.

468 M. Pennsylvania Co.'s Lines in 12-13¾ hrs. (fare $ 12; sleeper $ 2½). — From New York to *Chicago* by this route, see R. 29a.

Pittsburg, see R. 24. The train crosses the *Allegheny River* (p. 197), runs through *Allegheny City* (p. 200), and follows the right bank of the *Ohio* for some distance. 25 M. *Rochester* (710 ft.), at the confluence of the Ohio and the *Beaver River*, which we now follow towards the N. (right). 30 M. *Beaver Falls.* Farther on we turn again to the W. (left) and beyond (45 M.) *Enon* (995 ft.) we enter *Ohio* (see p. 353). — 83 M. *Alliance* (1100 ft.) is the junction of a branch-line to *Cleveland* (see p. 201). — 101 M. **Canton** (*Courtland*, $ 2½-5, R. from $ 1; *Hot. McKinley*, $ 2½-4), a city of 30,667 inhab., in a fine wheat-growing district, was the home of President McKinley (d. 1901), to whom an elaborate monument has been erected (enshrining the bodies of himself and his wife). — 175 M. *Mansfield* (17,640 inhab.; p. 232). — 189 M. *Crestline* (1170 ft.) is the junction of lines to Toledo, Cleveland, Cincinnati, Indianapolis, etc. — 201 M. *Bucyrus* (6560 inhab.). Beyond (288 M.) *Van Wert* we enter *Indiana* (p. 357).

320 M. **Fort Wayne**, an important railway-centre (comp. pp. 357, 409). From this point the route is substantially the same as that described at p. 358. — 360 M. *Warsaw*, on the *Tippecanoe River*; 384 M. *Plymouth*; 415 M. *Wanatah*; 424 M. *Valparaiso* (p. 358). We now approach *Lake Michigan* (right). Various suburban stations.

468 M. **Chicago** *(Canal St. Station)*, see R. 51.

b. Viâ Columbus and Logansport.

507 M. Pittsburg, Cincinnati, Chicago, & St. Louis Railway (Pennsylvania Co.'s 'Pan Handle Line') in 16-19 hrs. (fares as above).

Pittsburg, see R. 24. This line runs at first almost due W., crossing the narrow arm of *West Virginia* (p. 189), interposed between Pennsylvania and Ohio. Beyond (42 M.) *Wheeling Junction* we cross the *Ohio River* and enter *Ohio* (p. 353). 43 M. *Steubenville* (730 ft.; Imperial, $ 2-2½), a city of 14,350 inhab., on the W. bank of the Ohio; 92 M. *Dennison*; 124 M. *Coshocton*; 138 M. *Trinway*, the junction of a line to Cincinnati; 160 M. *Newark* (p. 352).

193 M. **Columbus.** — Chittenden Hotel, from $ 3; Hartman, R. from $ 1½; Grand Southern, $ 2½-5, R. from $ 1; Neil Ho., R. from $ 1; Park Hotel, from $ 2, R. from $ 1. — *Tramways* traverse the principal streets. — *Post Office*, Capitol Sq., cor. of State St. and Third St.

Columbus (745 ft.), the capital of Ohio, is a thriving city of (1900) 125,560 inhab., situated on the E. bank of the *Scioto River*. Its commerce is important, and it has manufactures of iron and steel goods, carriages, and agricultural implements (value in 1900, $ 40,000,000). Its streets are broad, well lighted by large electric arches, and much better paved than is usual in American cities.

Broad Street, in particular, affords a delightful drive of 7 M. — The *State Capitol* is a large and somewhat odd-looking building, surrounded by a small park full of tame grey squirrels. Other important buildings are the *Ohio State University* (2275 students), the *Central Ohio Lunatic Asylum*, the *Deaf and Dumb Asylum*, the *State Penitentiary*, the *U. S. Barracks* (in a pretty park), the *Court House*, the *Starling Medical College*, the *Idiot Asylum*, the *Blind Asylum*, and the *Board of Trade*. *Goodale Park* lies at the N. end of the city.

From Columbus to *Cincinnati*, see p. 403. Railways also run hence to *Toledo*, *Cleveland*, *Indianapolis*, etc.

Numerous unimportant stations. — 240 M. *Urbana* (1030 ft.; 6808 inhab.), a railway-centre, with the Curry Normal & Industrial Institute (the 'Tuskegee of the North'; comp. p. 572); 266 M. *Piqua* (12,172 inhab.). At (276 M.) *Bradford Junction* the railway forks, the left branch leading to Indianapolis (p. 401) and St. Louis (p. 410), while the Chicago line keeps to the right. At (297 M.) *Union City* we enter *Indiana* (p. 357). 350 M. *Marion* (11,862 inhab.); 386 M. *Anoka Junction* (p. 402). — 390 M. **Logansport** (605 ft.; *Barnett*, $2\frac{1}{2}$-3; *Johnston*, $2), a city of 16,204 inhab., at the confluence of the *Wabash River*, *Eel River*, and *Wabash & Erie Canal*, is an intersecting point of several railways (comp. p. 402). — 415 M. *Winamac*; 466 M. *Crown Point*. — In entering Chicago the railway crosses the Drainage Canal (p. 373) by a swing-bridge, 400 ft. long and 112 ft. wide; it is laid with eight tracks.

507 M. **Chicago** *(Canal St. Station)*, see R. 51.

49. From Baltimore to Chicago.

860 M. Baltimore & Ohio Railroad in 22-25 hrs. (fare $17; sleeper $5). This line passes some fine scenery. — From New York to *Chicago* by this route, see p. 232.

From Baltimore to (40 M.) *Washington*, see R. 27. A good view of Washington is enjoyed as we leave it. The line runs towards the N.W. through *Maryland* (p. 189). Beyond (76 M.) *Dickerson* the *Potomac* comes into sight on the left. — 83 M. *Washington Junction*.

This is the junction of a line to (15 M.) Frederick (9296 inhab.), the scene of Barbara Frietchie's exploit with the flag and Stonewall Jackson (see Whittier's poem and Mrs. Caroline Dall's book). *Francis Scott Key* (1779-1843), author of 'The Star-Spangled Banner' (p. 204), is buried in Mt Olivet Cemetery, opposite the entrance of which is a handsome monument, by Alex. Doyle, erected to him in 1898.

At (84 M.) *Point of Rocks* (230 ft.) we thread a tunnel below a promontory of the *Catoctin Mts.*, a prolongation of the Blue Ridge.

Farther on the valley contracts and the hills grow higher. Near (93 M.) *Weverton* (250 ft.), the junction of a line to (24 M.) *Hagerstown* (p. 189), took place the battle of South Mountain (Sept. 14th, 1862). The scenery here is very picturesque. The train soon crosses the Potomac and enters *West Virginia* at —

96 M. **Harper's Ferry** (270 ft.; *Conner's*, $2; *Hill Top Ho.*, *Lockwood Ho.*, on the hill), grandly situated on the point of land formed by the confluence of the Potomac and *Shenandoah*, with the *Maryland Heights* on the one side and the *Virginian* or *Loudon Heights* on the other. Pop. 1675, with *Bolivar*. The name of this little place is widely celebrated through the famous raid of John Brown (see below), practically the first scene of the Civil War. The armoury and arsenal, destroyed during the Civil War, have not been rebuilt.

John Brown of Ossawatomie, at the head of a party of about 20 armed Abolitionists, entered Harper's Ferry by the bridge on the night of Oct. 16th, 1859, and took possession of the Arsenal, intending to liberate the negro-slaves and occupy the Blue Ridge as a base of hostilities against the slave-owners. The negroes, however, did not rise, and Brown and most of his companions were killed or captured, after two days' fighting, by a squad of U. S. Marines that had come to the aid of the Virginia militia. The small engine house in which John Brown made his last stand (known as 'John Brown's Fort') has been removed to a small park on the Shenandoah, about 4 M. from Harper's Ferry. Its original site is marked by a small monument. John Brown and six of his associates were hanged at Charlestown (p. 597), 10 M. to the S.W.

The visitor should ascend from the station to (5-10 min.) the top of the promontory (about 300 ft. above the river), which commands a fine *View of the confluence of the rivers and of the gap made in the Blue Ridge by their combined waters bursting through it. Just below, on the Shenandoah side, is a curious pile of rocks known as *Jefferson's Rock*. We may follow the path along the Shenandoah (high above it) and then go on by road, passing the large *Storer College*, to (1 M.) the top of the ridge called *Bolivar Heights*, which commands a splendid *View of the fertile *Valley of Virginia (Shenandoah Valley)*, backed by the Allegheny Mts., 30 M. away. To the N. lies the battlefield of *Antietam* (p. 597). — A fine drive may be taken on the road round the promontory at the foot of the cliffs. — The ascent of *Maryland Heights (1455 ft.; view) takes 1½ hr. (bridle-path). We cross the Potomac and turn to the left. About ⅔ of the way up we take the less promising path to the left.

Beyond Harper's Ferry the line leaves the Potomac for a time. 103 M. *Shenandoah Junction* is the junction for the railway through the Shenandoah Valley (see R. 96). 114 M. *Martinsburg*, the junction for Harrisburg, see p. 189. Farther on we cross *North Mt.* (550 ft.) and rejoin the Potomac (right), on the other side of which, at (128 M.) *Cherry Run*, are the ruins of *Fort Frederick* (1755). The line hugs the winding stream, with the hills rising abruptly on each side. 143 M. *Sir John's Run*, so named after Sir John Sinclair, Gen. Braddock's Quartermaster. Beyond (185 M.) *Patterson's Creek* we cross the Potomac and re-enter Maryland. — 192 M. *Cumberland* (640 ft.; Queen City Hotel, with rail. restaurant, $ 2-3), a city with 17,128 inhab., rolling-mills, and glass-works.

Our line here crosses the Western Maryland R. R., which runs E. to (164 M.) *Baltimore* (see p. 209) and S.W. to *Elkins* and (159 M.) *Durbin*. — Cumberland is also the junction of a line to (150 M.) *Pittsburg* (p. 197), running viâ the picturesque *Youghiogheny Valley*, *Connellsville*, and *McKeesport*.

Our line turns to the S.W. and continues to follow the Potomac. The scenery is rugged and picturesque. Near (216 M.) *Keyser* (800 ft.) we cross the river into West Virginia, but soon recross it. Near (221 M.) *Piedmont* (930 ft.) is *Fort Pendleton*, constructed in 1861

to guard the crossing of the Potomac. We now leave the river and begin the steep ascent of the *Allegheny Mts.* 228 M. *Frankville* (1700 ft.); 233 M. *Swanton Water Station* (2280 ft.); 237 M. *Altamont* (2620 ft.), the highest point of the line. The descent is more gradual, and we pass at first through a comparatively level district known as the *Glades*, on the crest of the Alleghenies and containing the headwaters of the *Youghiogheny*. 241 M. **Deer Park Hotel* (2455 ft.; from $ 3½), a summer-resort; 243 M. *Mountain Lake Park* (Hotel, from $ 2); 246 M. *Oakland* (2370 ft.; Oakland, $ 2½-4), another attractive summer-resort; 256 M. *Terra Alta* (2550 ft.). We now descend through cuttings and tunnels, to the *Cheat River Valley*, crossing the river at (268 M.) *Rowlesburg* (1390 ft.; *View to the right). We now begin another steep ascent to the crest of *Laurel Hill*. 273 M. *Anderson* (1855 ft.). Beyond (275 M.) *Tunnelton* (1820 ft.) we thread the *Kingwood Tunnel*, ¾ M. long. 281 M. *Newburg* (1215 ft.). At (294 M.) *Grafton* (995 ft.), on the *Tygart's Valley River*, we leave the mountains.

Our line (to Wheeling and Chicago) here diverges to the right from the line to Parkersburg, Cincinnati, and St. Louis (see R. 60 d) and runs towards the N.W., down the Tygart's River. Beyond (316 M.) *Fairmont* (875 ft.), at the head of navigation on the *Monongahela*, we ascend the picturesque ravine of *Buffalo Creek*, passing through the head of the pass (1150 ft.) by a tunnel. We then descend along a branch of *Fish Creek*, threading several tunnels. At (382 M.) *Moundsville* (640 ft.) we approach the *Ohio* (to the left).

The place takes its name from an *Indian Mound*, 70 ft. high and 820 ft. in circumference at the base, in which two sepulchral chambers were found, containing three skeletons (comp. p. 408).

At (389 M.) *Benwood* we cross the river and enter *Ohio*. Beyond this point we run by Central Time (p. xiv).

Wheeling (645 ft.; *Windsor*, *McClure Ho.*, $ 2½-3½), on the Ohio, 4 M. above Benwood, is the largest city in West Virginia (38,878 inhab.) and has manufactures of nails, iron, pottery, and glassware (value in 1900, $ 16,750,000). It is an important railway-centre (to Pittsburg, see p. 201).

390 M. *Bellaire* (655 ft.) lies on the Ohio side of the river, opposite Benwood (see above). — 469 M. *Zanesville* (710 ft.; Clarendon, $ 2½-4; Rogge, $ 2-3½), a manufacturing city with 23,538 inhab., at the confluence of the *Muskingum River* and the *Licking River*, has a curious Y bridge, with three arms meeting in a central pier. We cross the Muskingum by a bridge 170 yds. long. — At (494 M.) *Newark* (820 ft.; Warden, from $ 2), with 18,157 inhab. and some large prehistoric mounds, we cross the Pittsburg, Cincinnati, Chicago, and St. Louis R. R. (see p. 349). Our line runs N.W. to (556 M.) *Mansfield* (p. 349) and (582 M.) *Chicago Junction*, where it forks, the left branch leading to Chicago, the right to (29 M.) *Sandusky* (p. 356). The stations beyond this point are unimportant. 670 M. *Defiance;* 707 M. *Auburn Junction;* 748 M. *Milford Junction*, 840 M. *Rock Island Junction;* 841 M. *South Chicago.*

860 M. **Chicago** *(Grand Central Station)*, see R. 51.

CLEVELAND
1 : 36.500
0 500 1000 2000 3000 4000 Ft.
0 200 500 1000 M.
LAKE ERIE
Harbor
East Breakwater
West Breakwater
Life Saving Sta.
Yacht Cl.
Union Depot
County Court Ho.
Lakeside
Clevel. Th.
City Hall
Court Ho.
Frankfort
Cent. Pol. Sta.
Erie Dep.
Canal Rd. N.W.
B.&O. Dep.
Riverbed St. N.W.
Elm St.
Center
Mulberry St.
Viaduct
L.S.&M.S.R.R.
Old River Bed
Old River Ave. N.W.
Crescent Ave. N.W.
Stone Ave. N.W.
Hermann Ave. N.W.
Tillman Ave. N.W.
Detroit Avenue
Clinton Avenue
Franklin Avenue
Division Ave. N.W.
Washington Ave.
Vermont Ave.
Church Ave. N.W.
Water Works
Majestic Th.
Reservoir Park
Woodbine A. N.W.
Bridge Ave. N.W.
Lorain Avenue
Fulton Rd.
Carroll Ave.
Chatham Ave.
Monroe Ave. S.W.
Monroe Cemetery
Jewish Cem.
Bailey Ave. S.W.
Abbey Ave. S.W.
Freeman A. S.W.
Fairfield A.
Kenilworth
Lincoln Sq.
Brevier A. S.W.
Starkwe
Auburn Ave. S.W.
Barber Ave. S.W.
Branch Ave. S.W.
Vega Ave. S.W.
Wade Ave. S.W.
Seymour Ave. S.W.
Erin Ave. S.W.
Walton Ave. S.W.
Clark Ave. S.W.
Clark Avenue S.
Mentor Ave. S.W.
Castle Ave. S.
Rowley Ave. S.
Buhrer Ave. S.
Holmden Ave. S.
Trent Ave. S.W.
Newark Ave. S.W.
Hyde Ave. S.W.
Walworth Ave. S.W.
Ravine Ave. S.W.
Walworth Ave. S.W.
Train Ave. S.W.
C.C.C.&St.L.R.R.
C.C.W.&I.R.R.
Rocky River
Cem.
Scranton Rd. N.W.
Carter Rd. N.W.
Merwin St. N.W.
University Ra
Stones Levee
Cent. Ave.
Lakeview Pk.
Summit Ave.
Lakeside
Rockwell
Public Sq.
Opera
A
B
C
1
2
3
4
5

Wagner & Debes' Geogl Estabt Leipzig

50. From Buffalo to Chicago.

a. Viâ Lake Shore & Michigan Southern Railroad.

540 M. Railway in 13-18 hrs. (fare $14; sleeper or parlor-car $3). This line skirts the S. shore of Lake Erie. From *New York* to *Chicago* by this route, see R. 29d.

Buffalo, see p. 136. Several small stations are passed. 32 M. *Silver Creek* was the home of Kitty, in 'A Chance Acquaintance', by W. D. Howells. At (40 M.) *Dunkirk* (Gratiot, from $2; Erie, $2-2½) connection is made with the Erie R. R. (comp. p. 231). Pleasant views of Lake Erie to the right. 49 M. *Brocton Junction* (for Chautauqua, etc.), see p. 201. — 58 M. *Westfield* is the point of intersection with the 'Old Portage Road', a military route constructed by the French explorers in 1753. A branch-line runs hence to Mayville (p. 201) and (18 M.) Chautauqua (p. 232). At (68 M.) *State Line* we pass into *Pennsylvania*.

88 M. **Erie**, see p. 187. — 103 M. *North Girard* (p. 201). Beyond (108 M.) *Springfield* we enter *Ohio* (the 'Buck-eye State', so called from the buckeye-tree, *Æsculus flava* or *glabra*). 129 M. *Ashtabula* is the junction of a line to Oil City, Pittsburg, etc. 154 M. *Painesville* is also the junction of a line to Pittsburg. 161 M. *Mentor* was the home of Pres. Garfield (d. 1881), whose large white house may be seen beyond the station, to the left. — In approaching Cleveland we cross *Gordon Park* (p. 355).

183 M. **Cleveland.** — **Railway Stations.** *Union Depot* (Pl. C, 1, 2), at the foot of W. 9th St.; *Erie Depot* (Pl. C, 2), near the Viaduct; *Baltimore & Ohio Depot* (Pl. C, 2), W. 9th St, cor. of Canal Road; *New York, Chicago, & St. Louis Railroad* (Pl. E, 3), Broadway S. E.; *Wheeling & Lake Erie Depot* (Wabash System; Pl. D, 2), Ontario St.

Hotels. *Hollenden (Pl. a; D, 2), Superior Ave. N. E., cor. of E. 6th St., a large house, R. from $1½; Colonial, in the Colonial Arcade (Pl. D, 2; p. 355), from $3½, R. from $2; Euclid (Pl. b; D, 2), cor. E. 14th St., R. from $1, with bath from $1½; Gillsy, E. 9th St, next door to the Baldwin Hotel, R. from $1½; Baldwin (Pl. c; D, 2), for men only, R. from $1; Forest City (Pl. d; C, 2), Public Square, $2-3.

Restaurants. *Hollenden*, see above; *De Klyn*, Euclid Ave., opposite E. 6th St.; *Hofbräu*, Prospect Ave., near the Colonial Arcade (p. 355); *Weber*, cor. E. 6th St. and Euclid Ave., and Superior Ave. N. E., opposite E. 3rd St.; *Finley's Luncheon Rooms*, in several streets.

Electric Tramways traverse the chief streets in all directions and run to various suburban points (fare within the city 3 c.). — **Cab** from station to hotel, each pers. 50 c., incl. baggage; per hour, $1½; other fares in proportion; 50 per cent more after 11 p.m. — A **Touring Car** leaves Public Square every 2 hrs. from 9 a.m., taking in the chief sights of the city (fare 25 c.).

Places of Amusement. *Opera House* (Pl. D, 2), Euclid Ave., cor. E. 4th St., *Colonial Theatre* (Pl. 3; D, 1, 2), these two for dramas; *Hippodrome*, Euclid Ave., near E. 9th St. (p. 355; various attractions); *Keith's*, Prospect Ave., near the Colonial Arcade (first-class vaudeville); *Empire* (Pl. 5; D, 2), *Star* (Pl. D, 2), these two for vaudeville and burlesque; *Cleveland* (Pl. C, 2; melodrama); *Majestic* (Pl. C, 3).

Post Office, Public Square (Pl. D, 2; p. 354).

Cleveland (580 ft. above the sea), the largest city of Ohio, with (1900) 381,768 inhab., lies on the S. shore of Lake Erie, at the mouth of the small *Cuyahoga River*, and, with its broad and well-paved streets, its green lawns and squares, and its numerous trees ('Forest City'), makes a favourable impression on the visitor. Its important iron and steel works, foundries, and machine shops produce goods to the annual value of $ 86,000,000. It was the original home of the Standard Oil Co., and it carries on a very extensive trade both by rail and by means of its excellent harbour, especially in iron ore and coal. Its factories, among which may also be mentioned those for the making of wire, gas-stoves, motor-cars, electric lamp carbons, and paints, are distributed along the various steam-railway lines, many of them being on the lake-front. Cleveland is one of the chief ship-building cities in the United States.

Cleveland was founded in 1796, but did not begin to grow with any rapidity until the completion of the Ohio Canal, connecting Lake Erie with the Ohio (1834). Its population in 1830 was 1000, in 1860 it was 43,417, in 1880 it was 160,142, and in 1890 it was 261,353. The value of its manufactures in 1900 was $ 140,000,000 (28,000,000*l.*; 59,000 hands).

The chief business-street is Superior Avenue (Pl. B-F, 2, 1), a really fine and wide thoroughfare, the W. end of which is lined with substantial business blocks, such as the *Perry-Payne Building* (Nos. 103-109). A little farther on the street expands into *Monumental Park or the Public Square (Pl. C, D, 2), containing a *Soldiers' Monument* and a *Statue of Gen. Moses Cleaveland* (1754-1806), founder and godfather of the city. The new **Federal Building**, at the N.E. corner of the square, will contain the *Post Office*, the *Custom House*, and the *Court House*.

This building is the first of the several public buildings comprised in the so-called 'Group Plan', the others being the City Hall, County Building, Public Library, and Union Station. A broad mall will connect all these buildings.

At the N.W. corner is the *Old Court House* (Pl. C, 2), adjoined by the *American Trust Building* (14 stories). On the N. side of the square, at the corner of Ontario St., is the handsome building of the **Society for Savings* (Pl. 11; C, 2), established in 1849 and now having deposits of upwards of 50 million dollars (ten millions sterling). There are no stock-holders, the net profits going to the 80,000 depositors (*View from the top of the building). Adjacent is the *Chamber of Commerce* (Pl. 1; C, D, 2), containing a handsome auditorium, with a library and reading-room. In Superior Ave., beyond the Federal Building, is the massive **City Hall** (Pl. D, 2; comp. above), which is adjoined by the temporary building of the *Public Library* (Pl. 8, D 2; 300,000 vols.; comp. above). — A little to the N. of this point is the huge *Central Armoury* (Pl. D, 1; 6000 seats).

***Euclid Avenue** (Pl. D-G, 2, 1), which begins at the S.E. angle of the Public Square, is at its E. end also an important artery of business and farther out becomes one of the most beautiful residence streets in America, with each of its handsome houses surrounded

by pleasant grounds and shady trees. At the N.E. corner of the Square and Euclid Ave. is the 16-story *Williamson Building* (Pl. 13; D, 2); a little farther on, also on the N. side of the Avenue, is the handsome *First National Bank;* on the right is the tall, narrow building of the *Guardian Savings & Trust Co.* To the left is the ***Arcade** (Pl. D, 2), 400 ft. long, 180 ft. wide, and 144 ft. high, with a fine five-balconied interior, running through to Superior Ave.; and to the right is the **Colonial Arcade** (Pl. D, 2), running through to Prospect Ave. At the corner of E. 6th St. are the tall *Garfield* (10 stories) and *New England* (16 stories) *Buildings* (Pl. 6, 7; D, 2). Nearly opposite the New England Building is the new TAYLOR ARCADE, just E. of which is the *Hippodrome Building* (p. 353). Farther on, near E. 9th St., is the *Citizens' Building* (Pl. 2; D, 2), with the offices of the Citizens Savings & Trust Co. and mural paintings by Kenyon Cox and E. Blashfield, and at the corner is the *Schofield Building* (Pl. 10, D 2; r.). Directly opposite the latter, at the S.E. corner of E. 9th St. and Euclid Ave., is the *Cleveland Trust Co.* At the corner of E. 12th St. is the handsome *Union Club* (Pl. 12; D, 2). Farther on are several fine churches. About 4½ M. from the Public Square (street-car), Euclid Ave. reaches UNIVERSITY CIRCLE, with a ***Statue of Senator M. A. Hanna** (1837-1904), by Saint-Gaudens, and one of *Kossuth*, erected by the Hungarians of Cleveland. To the right is the building of the *Western Reserve Historical Society*, to the left is the *Elysium*, an artificial ice skating rink. Just beyond the Circle is the entrance to ***Wade Park**, which contains statues of *Commodore Perry* (p. 187) and *Harvey Rice*, and a *Goethe-Schiller Monument*. Opposite the Park are the buildings of the **Western Reserve University** (including *Adelbert College*, *Woman's College*, *Law*, *Medical*, and *Dental Schools*, and a *Library School*, in addition to the graduate department; 900 students) and the *Case School of Applied Science* (450 students). About 1 M. farther on, the avenue passes ***Lake View Cemetery**, containing the ***Garfield Memorial** (adm. 10 c.; erected in 1890), the *Rockefeller Monolith*, the graves of *Senator Hanna* (see above) and *John Hay* (1838-1905), and the *Wade Memorial Chapel*.

Prospect Avenue (Pl. D-G, 2), which runs parallel to Euclid Ave. on the S., is little inferior to it in beauty. At the corner of E. 9th St. are the *Rose Building* (Pl. 9; D, 2) and the handsome building of the *Young Men's Christian Association* (Pl. D, 2; r.). — Another favourite resort is ***Gordon Park**, to the N.E. of the city, on the lake, connected with Wade Park by a fine boulevard, traversing *Rockefeller Park*. — The huge *Market* (Pl. D, 2), in Ontario St., is well equipped.

The main part of the city is connected with the *Western Quarters*, on the other side of the Cuyahoga Valley, by an enormous ***Viaduct** (Pl. C, 2; *View), 1070 ft. long, completed in 1878 at a cost of $2,200,000 (440,000*l.*). The main portion of the viaduct is of stone, but the central part is of iron lattice-work and swings open to allow the passage of vessels. There are three other similar viaducts at different parts of the city (see Pl. D, 3; F, 3).

Driving parties may cross the Viaduct and follow *Superior*, *Detroit*, and *Lake Aves.* (comp. Pl. A, 3) to (8 M.) *Rocky River*, a favourite resort in summer.

A visit may also be paid to the great Oil District at the S. end of 55th St. (comp. Pl. G, 5), where the enormous tanks and refining works of the *Standard Oil Co.* are situated.

The huge Ore Docks of the Erie R. R., on the W. side of the city, sometimes contain 2,000,000 tons. — The Harbour (Pl. A-C, 1, 2) and *Breakwater* (2 M. long) also repay inspection.

At *Warrensville*, ca. 7 M. to the S.E. of the town, is the *Municipal Farm*, an interesting experiment in the care of prisoners, infirmary patients, and consumptives.

Cleveland is, naturally, an important Railway Centre, from which lines radiate, more or less directly, to *Pittsburg* (p. 197), *Marietta*, *Columbus* (p. 349), *Cincinnati* (p. 405), *Toledo* (see below), *Chicago* (p. 366), etc. — Steamers ply to all important points on the Great Lakes.

At (208 M.) *Elyria* the line forks, the branches reuniting at *Millbury* (see below). The chief station on the right branch is (243 M.) **Sandusky** (*West Ho.*, *Sloane Ho.*, $2-3), with a good harbour, a *Soldiers' Home* (visible to the left), the *State Fish Hatchery*, and a large trade in fish and fruit. Pop. 19,664. Beyond Sandusky we cross the *Bay Bridge* (4 M. long), affording a fine view of the lake. — The left or inland line runs viâ (217 M.) *Oberlin* and (238 M.) *Norwalk*. Oberlin College, with 1850 students, a fine library (80,000 vols.), and the Olney Art Collection, was the first college opened to both sexes, white or coloured. — 288 M. *Millbury*.

296 M. **Toledo** (*Secor*, $3-5, R. $1½-3½; *Boody Ho.*, $2½-4, R. from $1; *St. Charles*, $2½-4, R. from $1; *Madison*, *Jefferson*, $2-3; *Wayne*, R. from 75 c.; *Rail. Restaurant*), a city and important railway-centre on the *Maumee River*, 6 M. from Lake Erie, with 131,822 inhab., has a large trade in grain, clover-seed, coal, iron ore, and timber, and numerous manufactures (annual value ca. $43,000,000). Among the handsomest of its buildings are the **Public Library* (75,000 vols.), the *Lucas County Court House*, and the *Toledo Club House*. The *Toledo Museum of Art*, at the corner of Madison and 13th Sts. (new building in Monroe St.), contains paintings, sculptures, Egyptian antiquities, and a fine art library. One of the newspapers is named the *Toledo Blade*. The *Monument to President McKinley* is by Albert Weinert. Many pleasant excursions may be made on the Maumee River.

From Toledo to Detroit, 65 M., railway in 1¾-2 hrs. (fare $1.30). The chief stations are (25 M.) *Monroe* (with an equestrian statue of Gen. Custer, 1839-76) and (44 M.) *Trenton*. — 65 M. *Detroit*, see p. 358.

From Toledo to Frankfort, 292 M., *Ann Arbor R. R.* in 11½ hrs. (fare $6). This line runs to the N.W. across Michigan. At (22 M.) *Dundee* it crosses the Detroit, Toledo, & Ironton Railway. 45 M. *Ann Arbor* (p. 362); 72 M. *Annpere*; 96 M. *Durand*; 107 M. *Owosso*; 138 M. *Ithaca*; 164 M. *Mt. Pleasant*; 227 M. *Cadillac*; 268 M. *Copemish*. — 292 M. **Frankfort** (*Royal Frontenac*, from $2½; *Park*, $2; *Windermere*, at Beulah, on Crystal Lake, $2) is a picturesque bathing-resort on Lake Michigan, 2 M. from *Crystal Lake* (9 M. by 3 M.). It is called at by the S.S. 'Manitou' (p. 364).

Beyond Toledo the line forks, the branches rejoining each other at Elkhart (see below). The 'Air Line' (used by through-trains) enters *Indiana* ('Hoosier State') at (337 M.) *Archibold* and runs through that state to (429 M.) *Elkhart*. The 'Old Line' enters *Michigan* ('Wolverine State') beyond (307 M.) *Sylvania* and passes (329 M.) *Adrian* (810 ft.; 9654 inhab. in 1900), the centre of a rich farming country, (362 M.) *Hillsdale*, a fine summer-resort, (408 M.) *Sturgis* (with the Lewis Art Gallery), and (420 M.) *White Pigeon*, the junction of a line to *Kalamazoo*, *Grand Rapids*, and *Mackinaw* (p. 362).

439 M. *Elkhart* (735 ft.; Depot Hotel, $ 2½; Rail. Restaurant) is a busy little city, with 15,184 inhabitants. 454 M. *South Bend* (725 ft.; Oliver, $ 2½-5), a city with 36,000 inhab., on the *St. Joseph's River*, is known for its carriages and wagons (Studebaker's works). — 481 M. **La Porte** *(Teegarden Ho., $ 2; Rail. Restaurant)*, a little town, with 7113 inhab. and brisk industries, lies near a chain of small lakes *(Clear, Stone, Pine Lakes)*, which afford pleasant excursions (hotels, $ 1½-2; small steamers). La Porte is the junction of a line to *Indianapolis* (p. 401). — 491 M. *Otis. Lake Michigan* (p. 366) soon comes into sight on the right. — 514 M. *Gary*, a new 'steel town', founded by the U. S. Steel Corporation in 1906 and already containing ca. 20,000 inhab., besides enormous steel-works, blast-furnaces, and so on. — 521 M. *Indiana Harbor* (South Bay Hotel, $ 2-3). We enter *Illinois* ('Prairie State') at (527 M.) *East Side*. Four other surburban stations are passed before we reach the *La Salle St. Station* at —

540 M. **Chicago** (see p. 366).

b. Viâ New York, Chicago, and St. Louis Railroad.

523 M. Railway *('Nickel Plate Line')* in 15-19 hrs. (fare $ 12; sleeper or parlor-car $ 3).

Buffalo, see p. 136. As far as (184 M.) *Cleveland* (p. 353) this line runs parallel with the one just described and passes the same stations. Beyond Cleveland it follows the shore of Lake Erie pretty closely. 210 M. *Lorain*, the junction of a line to *Elyria* (p. 356). Beyond (221 M.) *Vermillion* the line bends to the left and runs inland. 248 M. *Bellevue* (Rail. Restaurant); 260 M. *Green Springs*, with sulphur springs; 280 M. *Fostoria*, the junction of several railways; 286 M. *Arcadia* (carriages changed for points on Lake Erie & Western R. R.); 300 M. *McComb;* 310 M. *Leipsic Junction*, for Dayton and Cincinnati. Beyond (349 M.) *Payne* we enter *Indiana*.

371 M. **Fort Wayne** (775 ft.; *Wayne Ho., $ 2½-3½; Rail. Restaurant*), an industrial city of 45,115 inhab., on the *Maumee River*, here formed by the confluence of the *St. Joseph* and the *St. Mary*, occupies the site of an old fort (first built in 1764), which plays a considerable part in Colonial history. It is a railway-centre of great importance (comp. p. 349). — Near (424 M.) *Tippecanoe*

Gen. Harrison ('Old Tippecanoe') defeated Tecumseh, at the head of the Miamis and Shawnees, in 1812. — 477 M. *Valparaiso*, with a university attended by 5150 students and having a medical department in Chicago. Board, lodging, and education may be had at this institution for $120 (24*l.*) a year. — Farther on we enter *Illinois*. 514 M. *Grand Crossing;* 516 M. *Englewood;* 522 M. *Thirty First Street* (Chicago).

523 M. **Chicago** *(Grand Central Station)*, see p. 366.

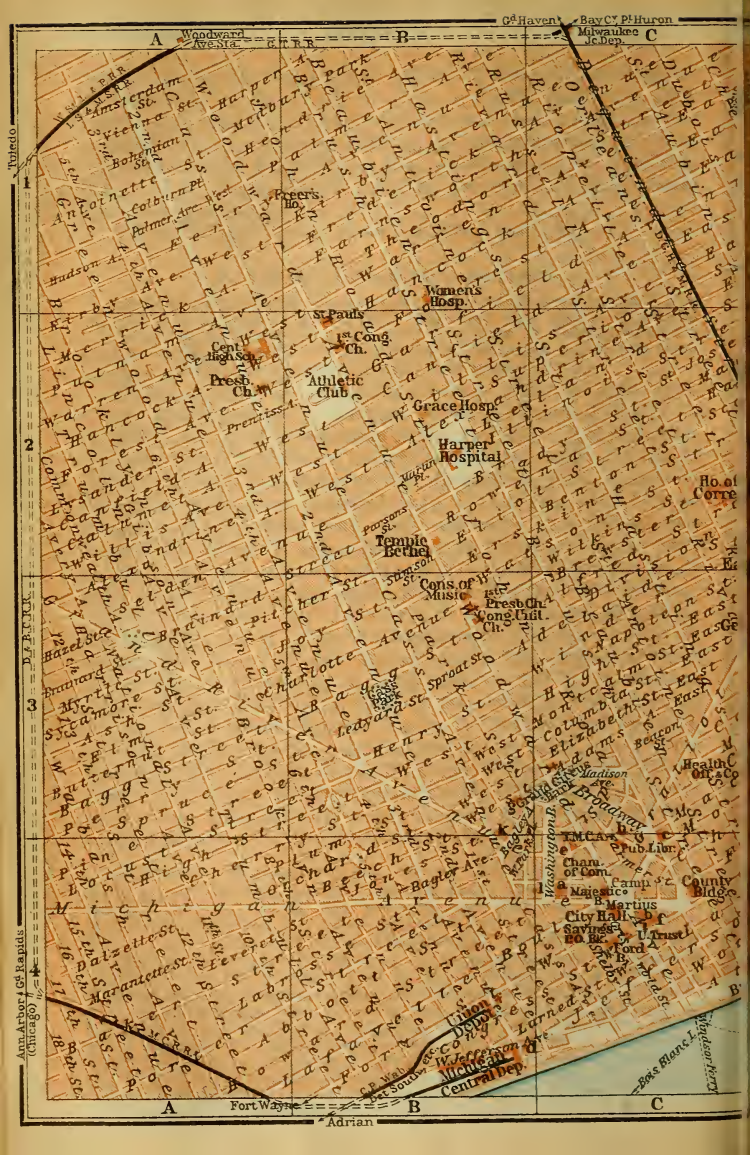
c. Viâ Michigan Central Railroad.

536 M. Railway *(North Shore Line* or *'Niagara Falls Route')* in 13-16 hrs. (fare $13; sleeper or parlor-car $3). This line runs on the N. side of Lake Erie, through Ontario. It affords a good view of *Niagara Falls* (see below). Luggage checked to United States points is not examined; small packages examined in crossing the Cantilever Bridge (p. 151).

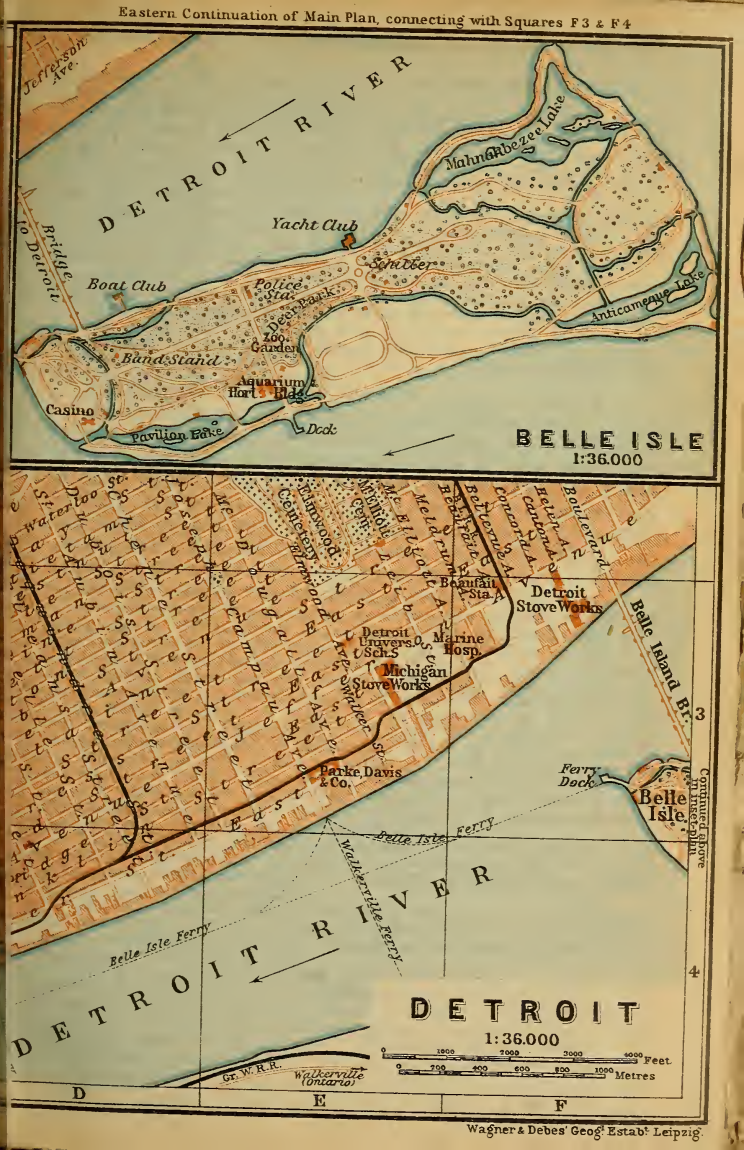
Buffalo, see p. 136. The train descends along the right bank of the *Niagara River* (p. 139) to (22 M.) *Niagara Falls, N. Y.* (p. 148), and (24 M.) *Suspension Bridge* (p. 144). It then crosses the river by the **Cantilever Bridge* described at p. 151 (*View of rapids) to (24½ M.) *Niagara Falls, Ontario* (p. 146). Thence it runs to the S., along the *Victoria Park* (p. 151), to (25½ M.) *Victoria Park* and (27 M.) *Falls View*, where all trains stop five minutes to allow passengers to enjoy the splendid **View of Niagara Falls* (p. 147). We then turn to the right (W.). — 38 M. *Welland*, a small town with 3000 inhab., lies on the *Welland Ship Canal* (27 M. long) uniting Lake Ontario with Lake Erie. It is the junction of a direct line to Buffalo and of a line to *Hamilton* and *Toronto*. — 79½ M. *Hagersville*. Near (120 M.) *Brownsville* is the large Lactomen Factory for the production of dried milk. — 139 M. **St. Thomas** *(Grand Central*, $2-2½), a thriving town with 11,485 inhab., is the junction of lines to Toronto, London (p. 364), St. Clair (p. 361), and *Port Stanley*, the last, the chief harbour on the N. side of Lake Erie, lying 8 M. to the S. — 194 M. *Fargo;* 220 M. *Comber;* 234 M. *Essex*. At (250 M.) *Windsor* (International, $1-2) the train is run on to a large steam-ferry (tunnel in progress, to be opened in 1909) and carried across the *Detroit River* to (251 M.) *Detroit*.

Detroit. — Railway Stations. *Central Station* (Mich. Cen. R. R.; Pl. B, 4) cor. of Third and W. Jefferson Aves; *Union Station* (Pl. B, 4; Wabash, Detroit Southern, Pere Marquette, and Can. Pac. railways), cor. of Third Ave. and Fort St.; *Brush Street Station* (Pl. C, D, 4), at the foot of Brush St., for the Grand Trunk and Lake Shore & Mich. Southern railways.

Hotels. Pontchartrain (Pl. b; C, 4), Campus Martius, R. from $2, with bath from $3; Tuller (Pl. g; B, 3), cor. Adams Ave. and Park St., R. with bath from $1½, well spoken of (with restaurant, D. 75c.); Cadillac (Pl. a; C, 4), Michigan Ave., from $3; Ste. Claire (Pl. c; C, 3, 4), cor. of Randolph St. and Monroe Ave., $2½-3½, R. from $1; The Wayne (Pl. d; B, 4), opposite the Central Station, $2½-4½, R. from $1; Griswold (Pl. e; C, 4), cor. of Griswold St. and Washington Boulevard; Brunswick (Pl. k; B, 3, 4), cor. Cass and Grand River Aves., $2-3½, R. from $1; Washington Inn (Pl. l; C, 4), Washington Boulevard, R. from $1; Normandie (Pl. f; C, 4), from $2½, R. from $1; Oriental (Pl. h, C, 3, 4; with


Gd Haven
Bay Cy Pt Huron
Milwaukee Jc Dep.
Woodward Ave. Sta.
G T R R
A
B
C
1
2
3
4
Toledo
Ann Arbor & Gd Rapids (Chicago)
D F & P C R R
Fort Wayne
Adrian
Women's Hosp.
St. Pauls
1st Cong. Ch.
Athletic Club
Grace Hosp.
Harper Hospital
Temple Beth El
Cons. of Music
Presb. Ch.
Cong. Guil. Ch.
Ho. of Corre
Health Off. & Co
Chan. of Com.
Pub. Libr.
County Bldgs.
City Hall
Savings Bk.
P.O. Bldg.
U. Trust
Ford
Lisbon
Detroit
Jefferson Ave
Michigan Central Dep.
Fort Wayne & Southwestern R.R.
Belle Isle
Detroit River

Eastern Continuation of Main Plan, connecting with Squares F3 & F4



Wagner & Debes' Geog. Estab. Leipzig.

good Turkish baths), Metropole (Pl. i; C, 4), these two commercial. — *Swan's Restaurant*, 87 Woodward Ave.

Electric Tramways traverse the principal streets (5 c.) and run to various neighbouring points. — **Cabs**: drive within the city limits, up to ½ M., 1 pers. 25 c., within 2 M. 50 c., 3 M. 75 c.; first hour 1-4 pers. $1½, each. addit. hr. $1; fare and a half between 11 p.m. and 5 a.m.; trunk over 50 lbs. 25 c. — **Electric Observation Car** from the vicinity of the City Hall every 2 hrs. (fare 25 c.).

Ferries ply from the foot of Woodward Ave. to *Belle Isle* (calling at the foot of Joseph Campau Ave., Pl. E 3) and to *Windsor* every ¼ hr., and to *Amherstburg* and *Bois Blanc Park* at 9 a.m. and 3.30 p.m., and from the foot of Joseph Campau Ave. to *Walkerville* every ½ hr. — **Steamboats** ply to *Put-in-Bay Islands* (p. 365), *St. Clair*, *Cleveland*, *Buffalo*, *Port Huron*, *Sault-Ste-Marie*, *Mackinaw*, and other points on the Great Lakes.

Theatres. *Detroit Opera House*, on the N. side of the Campus Martius, between Monroe and Woodward Aves. (Pl. C, 4); *Temple*, adjoining the Opera House, cor. Opera House St. and Monroe Ave. (vaudeville); *Lyceum*, cor. Randolph and Champlain Sts. (Pl. C, 4). — *Electric Amusement Park*, adjoining Belle Isle Bridge (p. 361)

Post Office (Pl. C, 4; p. 360), Fort St. W., corner of Shelby St.

Detroit (580 ft.), the chief city of Michigan, with (1905) 317,591 inhab., is situated 18 M. from Lake Erie, on the N.W. bank of the *Detroit River*, which connects that lake with the small *Lake St. Clair* (530 ft.), just above the city, and so with Lake Huron (p. 365). It is a well-built town, with numerous trees, carries on a large traffic in grain, wool, pork, and copper, and has many important manufactures. Most of its streets (which are notable for their cleanliness) are laid out on the rectangular plan, but several avenues radiate from a centre like the spokes of a wheel.

The site of Detroit was visited by Frenchmen in 1670 and 1679 (La Salle), and in 1701 the Sieur de la Motte Cadillac (p. 293) founded *Fort Pontchartrain* here. In 1760 it passed into the hands of the English, and in 1763-66 it was successfully defended for 15 months against the Indian chief Pontiac. It was nominally ceded to the United States in 1783, but the Americans did not become masters of it till 1796. The fort was taken by the British in 1812 and retaken by the Americans in 1813. Detroit was incorporated as a city in 1824, with about 1500 inhabitants. In 1850 the population was 21,019, in 1880 it was 134,834, in 1890 it was 205,876.

Some idea of the volume of traffic on the Great Lakes may be gathered from the fact that 30-35,000 vessels pass Detroit yearly in the seven or eight months during which navigation is open, carrying about 60-70 million tons of freight. During the season a U. S. post-office steamer carries mail to and from the passing vessels.

The staples of its manufactures, the value of which in 1900 was over $100,000,000 (20,000,000*l.*), are cars and car-wheels, iron and steel goods, automobiles, adding machines, stoves (150,000 annually), drugs, confectionery, fur, salt, and tobacco.

The huge soda ash plants of the *Solvay Process Co.*, *J. B. Ford & Co.*, and the *Michigan Alkali Co.*, taking advantage of the immense deposits of salt in this locality and the near proximity of good limestone, are situated on the river just below the city.

The finest private art-gallery in Detroit is that of *Mr. Charles L. Freer*, 33 Ferry Ave. East (Pl. A, B, 1), for which free cards of admittance may be obtained at 915 Union Trust Building. This gallery contains the largest group of works by *Whistler* in existence and good examples of *Tryon*, *Dewing*, and *Abbott Thayer*, as well as many Oriental paintings and potteries.

Woodward Avenue (Pl. A-C, 1-4), running N.W. from the river and dividing the city into two nearly equal parts, is the main business thoroughfare. Near its foot (S.E. end) are the chief *Steam-*

boat Wharves and the *Ferry to Windsor* (p. 359; Pl. C, 4). About $^1/_2$ M. from the river the street expands into the Campus Martius (Pl. C, 4), adorned with a handsome fountain, from which *Michigan* and *Gratiot Avenues* diverge to the left and right. To the left stands the **City Hall** (Pl. C, 4; to be remodelled), the tower (view) of which contains a clock with a dial $8^1/_2$ ft. in diameter. In front of the City Hall is the *Soldiers' Monument*, by Randolph Rogers, and in front of the *Opera House* (p. 359) is a *Bust of ex-Governor Bagley.* At the corner of Woodward Ave. rises the tall *Majestic Building* (Pl. C, 4; fine view from the roof, adm. 10 c.).

In Gratiot Ave., near the Campus Martius, is the **Public Library** (Pl. C, 4), containing 220,000 vols. and some historical relics. At the corner of Griswold St. (running parallel with Woodward Ave. on the W.) and Grand River Ave. is the *Young Men's Christian Association* (Pl. C, 4). The *Chamber of Commerce* (Pl. C, 4), at the corner of Griswold and State Sts., is 13 stories high. — The *Post Office* (Pl. C, 4), in Fort St., adjoining the site of the old *Fort Lernoult*, is a handsome building. The evacuation of Fort Lernoult by the British on July 11th, 1796, was the closing act of the War of Independence (memorial tablet). In the same street, at the S.E. corner of Shelby St., is the *State Savings Bank* (Pl. C, 4), and adjoining it on the E. is the tall *Penobscot Building.*

Just to the E. of the Campus Martius, in Cadillac Square, stands the *County Building (Pl. C, 4). It is in a plain Renaissance style with a Corinthian portico over the main entrance, sculptures in the pediment, and a tower surmounted by a gilded dome. In front of it is the *Cadillac Chair*, erected in 1901 to commemorate the 200th anniversary of the city's foundation.

A little farther on Woodward Ave. reaches Grand Circus Park (Pl. B, C, 3), a square with trees, fountains, and a *Statue of ex-Governor Pingree* (1840-1901), by R. Schwartz. To the N., at the corner of Adams St. (Pl. C, 3), is the *Central Methodist Church*, with a richly decorated interior. One block to the E., between Adams and Elizabeth Sts., is the new building of the *Y. M. C. A.* At the corner of Edmund Place, $^1/_2$ M. farther on, are the **First Unitarian* and *First Presbyterian Churches* (Pl. B, 3), two fine Romanesque buildings of red stone. Between Erskine and Eliot Sts., to the right, is the *Temple Bethel* (Pl. B, 2), an effective Jewish synagogue. Also to the right, at the head of Martin Place, is the handsome *Harper Hospital* (Pl. B, 2); and *Grace Hospital* (Pl. B, 2) is also seen to the right (cor. of Willis Ave. and John R. St.) a little farther on. To the left, a little higher up, is the *Detroit Athletic Club* (Pl. B, 2; Nos. 833-865). The N. end of Woodward Avenue and the adjoining streets form the principal residence-quarter of the town.

Jefferson Avenue (Pl. C-F, 2-4), which runs at right angles to Woodward Ave., crossing it $^1/_5$ M. from the river, contains many of the chief wholesale houses, and towards its N.E. end has also many pleasant residences. The site of Fort Pontchartrain (p. 359) was at the corner of Jefferson Ave. and Griswold St., two squares to the W. of Woodward Ave. (memorial tablet on the Griswold St. side of the office of the *Michigan Mutual Life Insurance Co.*). To the E., on the left side of the street, are the R.C. *Cathedral of SS. Peter and Paul* and the

Jesuit College (C, D, 4), and on the right side the *Academy of the Sacred Heart* (Pl. C, 4). On the same side, at the corner of Jefferson Ave. and Hastings St., about 1/2 M. to the E. of Woodward Ave., stands the *Museum of Art (Pl. D, 4; Sun. 2-4, other days 9-4, free).

The chief contents of the Museum are the *Scripps Collection of Old Masters* and the *Stearns Collection of Japanese, Chinese, and East Indian Curiosities*. The former contains a painting by *Rubens* (David and Abigail), pen-and-ink drawings by *Raphael* and *Michael Angelo*, and works ascribed to *Lippi, Pinturicchio, Masaccio, Bellini, Da Vinci, Matsys, Titian, Del Sarto, Correggio, Caracci, Guido Reni, Cuyp, Rembrandt, Teniers, Murillo, Corn. de Vos, De Hoogh*, etc. The museum also contains modern paintings by *Gari Melchers, Munkacsy, Tryon, F. D. Millet*, and others.

At Nos. 1022-1056 Jefferson Ave., near Elmwood St., are the large *Michigan Stove Works* (Pl. E, 3).

In Atwater St., near this point, is the huge *Drug Manufactory of Messrs. Parke, Davis, & Co.* (Pl. E, 3). From the foot of Campau Ave. (Pl. E, 3), a ferry runs to *Walkerville*, with its large distilleries.

About 3 M. from Woodward Ave. we reach the bridge crossing an arm of the river to *Belle Isle (Pl. F, 3, 4, and inset-plan), which is about 700 acres in extent and forms a beautiful public park, with fine trees and still retaining many of its natural features unimpaired. It contains a *Statue of Schiller* (1908), a small *Zoological Collection*, a large *Aquarium & Horticultural Building*, and a *Casino*. In summer park-carriages take visitors round for a small fee. Fine view of Lake St. Clair from its E. end. The *Detroit Boat Club* here has an artistic boathouse (visitors welcome). *Ferries*, see p. 359.

Among other points of interest in Detroit are *Elmwood Cemetery* (Pl. E, 2), in the E. part of the city, about 1/2 M. to the N.W. of Jefferson Ave.; *Fort Wayne*, on the river, 3 1/2 M. to the S.W. of Woodward Ave. (tramway, marked Delray, through Fort St.), garrisoned by a few companies of U. S. troops; *Water Works Park* (beyond Pl. F, 2), on the river, about 4 M. from the centre of the city; *Palmer Park* (beyond Pl. A, 1), about 5 M. out along Woodward Ave.; and *Clark Park*, a piece of original forest in the W. part of the city. — A wide Boulevard has been constructed round the entire city, beginning and ending at the river-front.

In summer Detroit forms an admirable centre for water and other excursions. — To the N. lies the beautiful **Lake District of Oakland County**, easily reached by the *Detroit United Electric Railway* in 1 1/4 hr., one division running direct to (25 M.; fare 25 c.) *Pontiac*, and another reaching the same point viâ (28 M.; fare 35 c.) *Orchard Lake*, the chief resort of the district. — Among other favourite resorts are *Grosse Pointe* (with country club and golf links), on *Lake St. Clair*, 9 M. to the E., with the country-houses of many of the citizens; *St. Clair Flats*, a shooting and fishing resort, with its hotels and cottages built on piles; *Windsor* (p. 359); *Mt. Clemens* (p. 362; also reached by trolley-line, passing the curious *Grotto of the Virgin*, 7 M. from Detroit); *St. Clair Springs* (Somerville, $ 2 1/2-5; Oakland, from $ 3); *Kingsville* (Ont.), on the N. shore of Lake Erie, 30 M. from Detroit; and *Put-in-Bay Islands* (p. 365).

From Detroit to *Toledo*, see p. 356.

From Detroit to Lansing and Grand Rapids, 153 M., railway (Pere Marquette) in 4-5 hrs. — 25 M. *Plymouth*. — 88 M. Lansing (*Downey*, $ 2-3 1/2; *Hudson*, $ 2-2 1/2), the capital of Michigan, is a manufacturing city of (1905) 20,276 inhab., on the *Grand River*. Adjoining the Capitol is a statue of

Gov. Austin Blair, erected in 1898. — 153 M. **Grand Rapids** (*Morton Ho.*, $ 2½-4; *Pantlind*, R. from $ 1; *Livingston*, $ 2½-4½), a busy city of (1905) 95,718 inhab., with fine water-power afforded by a fall of 18 feet on the Grand River (value of manufactures in 1900, $ 25,000,000). There are upwards of 100 furniture factories here, some of which (such as Berkey & Gay) produce excellent imitations of Chippendale, Sheraton, and other old styles. The most beautiful building in the city is the *Ryerson Free Library* (1904).

From Detroit to Port Huron, 57 M., railway in 1¾ hr. (electric line in 3¾ hrs.). — 22 M. *Mt. Clemens* (*Park, Colonial, from $ 3), a large summer-resort, with alkaline sulpho-saline springs which are much frequented by rheumatic and gouty patients. — 57 M. *Port Huron* (p. 365)

From Detroit to Mackinaw City (*Mackinac Island*), 291 M., railway in 9 hrs. — This railway traverses nearly the entire length of Michigan from S. to N., passing through one of the greatest 'lumbering' regions in America. 60 M. *Lapeer;* 87 M. *Vassar*, the junction of a line to (22 M.) *Saginaw City* (46,610 inhab. in 1905). — 108 M. **Bay City** (*Fraser Ho.*, $ 2½-3), situated near the point where the *Saginaw* empties into *Saginaw Bay*, with (1905) 27,644 inhab. and a large trade in timber, fish, and salt. — 149 M. *Alger;* 228 M *Gaylord*. 263 M. *Topinabee* (Pike's Tavern, $ 2) is the station for *Burt* and *Mullet Lakes*. 275 M. *Cheboygan*. — 291 M. *Mackinaw City* (Wentworth, $ 2), with (1905) 696 inhab., lies at the N. extremity of Michigan, on the *Straits of Mackinac* (4 M. wide), which connect *Lake Michigan* (p. 366) and *Lake Huron* (p. 365). Steamers run hence, in connection with the trains, to *St. Ignace* (p. 396), on the opposite side of the Straits, and to (8 M.) *Mackinac Island* (see below), while others run to *Sault-Ste-Marie* (p. 397), *Manistique*, etc.

*Mackinac Island, a rocky and wooded little islet, 9 M. in circumference, contains a good deal of picturesque scenery in its narrow limits and has become a favourite place of summer-resort. Its fresh breezes, clear water, excellent fishing, and romantic legends are additional attractions. On the S. side of the island lies the picturesque village of *Mackinac*, with 736 inhabitants. On the cliff above it stands *Fort Mackinac* (abandoned), and a little farther inland are the ruins of *Fort Holmes* (300 feet; *Views), built by the British. The largest hotel on the island is the *Grand Hotel* (1300 beds; high charges), on a bluff near the village; and good accommodation may also be obtained at the *Astor House* ($ 2½-3), the *Mission House* ($ 3), the *Murray* ($ 2-3), the *Island House* ($ 2½-4), the *Lake View* ($ 3-3½), and other smaller inns and boarding-houses. Among the chief points of interest on the island are the **Arch Rock*, on the E. side, 150 ft. high; the *Lover's Leap*, 145 ft. high; *Robertson's Folly*, the *Giant's Causeway*, *Sugar Loaf Rock*, *Scott's Cave*, the *British Landing* (1812), etc. Excursions may be made to *St. Ignace* (p. 396), the *Cheneaux Islands*, *Bois Blanc Island*, etc. A steamboat tour round the island should also be made. The island was frequently visited by the early French travellers and remained in possession of France from 1610 to 1761, when it was ceded to Great Britain. It came into the hands of the United States in 1796, was taken by the English in 1812, and was restored to the United States in 1815. The Astor House (see above) was the headquarters of the *Astor Fur Co.*, founded by John Jacob Astor, in 1809-50. Comp. the 'Annals of Fort Mackinac', by *D. H. Kelton*, and 'Anne', by *Constance Fenimore Woolson*. — Mackinac Island is also reached from Detroit by steamer.

From Detroit to Cincinnati, 263 M., railway in 7-8 hrs. The chief intermediate stations are (60 M.) *Toledo* (p. 356), *Lima* (131 M.), *Dayton* (204 M.; p. 232), and *Hamilton* (237 M.; p. 403). — 263 M. *Cincinnati*, see p. 405.

From Detroit to Columbus, 184 M., railway in 9 hrs. We diverge from the above line at (60 M.) *Toledo*, and follow the *Hocking Valley Railway*. — 184 M. *Columbus*, see p. 349.

Beyond Detroit the line runs almost due W., across the State of Michigan. 268½ M. *Wayne Junction;* 280½ M. *Ypsilanti*, a paper-making town of (1905) 7587 inhab., on the *Huron River*, which we now follow. — 288 M. **Ann Arbor** (770 ft.; *Cook Ho.*, from $ 2;

American, $ 2-3), a residential, tree-shaded city of (1905) 14,599 inhab., situated on both sides of the Huron River, is the seat of the UNIVERSITY OF MICHIGAN, founded in 1837.

This university, one of the most important educational institutes in the United States, is attended by about 5000 students, of whom 1/6 are women. It differs from the large Eastern universities in being a State institution. It is richly endowed and has about 30 buildings, good museums, hospitals, and laboratories, and a library of about 250,000 volumes. Its Shakspeare collection (McMillan Collection) is second only to that of Boston Public Library (p. 264). Among its other collections is the *Stearns Musical Collection* (1200 pieces). The university also possesses an experimental tank for naval engineering.

Ann Arbor is also connected with Detroit by electric tramway (fare 50 c.).

327 M. *Jackson* (925 ft.; Ruhl, Blackman, $ 2-3), an industrial town on the *Grand River*, has (1905) 25,300 inhab., and is the seat of the state-prison, which, with its central tower, may be seen to the right. It is the junction of lines to Lansing (p. 361), Grand Rapids (p. 362), etc. Beyond (337 M.) *Parma* we follow the wheat-growing valley of the *Kalamazoo River*. 348 M. *Albion;* 359 M. *Marshall.* — 372 M. *Battle Creek* (*Battle Creek Sanitarium, from $ 3 per day, with treatment from $ 20 per week; Post Tavern, from $ 3), is famous for its manufactories of cereal foods (Force, Korn Krisp, etc.), a visit to which is of some interest. — 395 M. *Kalamazoo* (Rickman, Burdick Ho., $ 2 1/2-4), an agricultural centre with (1905) 29,782 inhab. and a Baptist College, is the junction of lines to Grand Rapids (p. 362) and *South Haven* (with interesting factories for making crates and baskets). — Our line now runs to the left (S.) to (443 M.) *Niles*, on the *St. Joseph River* (4641 inhab. in 1905). — 469 M. *New Buffalo.* We now enter *Indiana* and have Lake Michigan to the right. 479 M. *Michigan City*, with the state-prison for N. Indiana; 500 M. *Lake.* Beyond (515 M.) *Hammond* we enter *Illinois.* 522 M. *Kensington;* 530 M. *Hyde Park.*

536 M. **Chicago** *(Illinois Central Station)*, see R. 51.

d. Vià Grand Trunk Railway.

541 M. RAILWAY in 15-18 hrs. (fares as at p. 358). This line passes through the peninsular part of the province of Ontario, one of the most fertile districts in Canada. — Hand-baggage examined in crossing the Niagara and St. Clair Rivers. — For fuller details, see *Baedeker's Canada.*

From *Buffalo* (p. 136) we proceed to (24 M.) *Suspension Bridge* either by the N. Y. C. & H. R. R. R. or the Erie R. R. Thence we cross the river by the Lower Steel Arch Bridge (p. 152). From the Canadian village of (24 1/4 M.) *Niagara Falls* (Rail. Restaurant) the line runs almost due W. At (34 M.) *Merritton* the train crosses the *Welland Ship Canal* (p. 358) by a bridge. — 36 M. *St. Catharine's* (Welland, a combination of hotel and sanatorium, $ 2 1/2-3 1/2, including baths, massage, etc.), a town of 9946 inhab., on the Welland Canal, with mineral springs. *Lake Ontario* is now often in view to the right. 50 M. *Grimsby Park*, with a Methodist camp-meeting ground, lies in a district producing abundance of peaches and other fruit.

68 M. **Hamilton** (255 ft.; *Royal*, $2½-4; *Waldorf*, $2-3; *Osborne*, $2; *Stockyard*, $1-1½; *Rail. Restaurant*), finely situated at the W. end of Lake Ontario, a busy industrial and commercial city of (1901) 52,634 inhab., is the junction of the railway to Toronto, which may also be reached by steamer. — 87 M. *Harrisburg* (735 ft.), the junction of various lines; 115 M. *Woodstock* (960 ft.).

144 M. **London** (805 ft.; *Tecumseh Ho.*, $2-3; *Grigg Ho.*, $1½-2; *Rail. Restaurant*), an important agricultural and railway centre, with 37,981 inhab. and a considerable trade. — 203 M. *Sarnia* (Vendome, $2-2½; Belchamber, $1½-2), on Lake Huron, with 8176 inhabitants. We now pass from Canada to the United States (Michigan) by a *Tunnel*, 1⅙ M. long, under the *St. Clair River*. This was constructed in 1888-91 at a cost, including approaches, of $2,700,000 (540,000*l*.). It consists of a cast-iron tube, with an inside diameter of 20 ft., and was designed by Mr. Joseph Hobson. The trains are now hauled through it by electric motors.

Central time is now the standard. 206 M. **Port Huron** *(Harrington*, $2½-3½; *Huron Beach Hotel; Rail. Restaurant)*, with (1905) 20,028 inhab., lies on Lake Huron, at the mouth of the *Black River*, and carries on a trade of considerable importance (lumber, fish, etc.). The train now runs to the S.W. through Michigan. 251 M. *Lapeer* (p. 362). From (288 M.) *Durand* (Rail. Restaurant) a line diverges to *Grand Haven*, on Lake Michigan, whence a steamer plies to *Milwaukee* (p. 381). 320 M. *Lansing* (p. 361); 365 M. *Battle Creek* (p. 363; Rail. Restaurant); 396 M. *Schoolcraft;* 442 M. *South Bend* (p. 357); 485 M. *Valparaiso* (p. 358); 521 M. *Blue Island Junction.*

541 M. **Chicago** *(Dearborn Station)*, see R. 51.

e. By Steamer.

It is possible to go the whole way from Buffalo to Chicago by water, through Lakes Erie, Huron, and Michigan, without change of steamer. — The 'North Land' and 'North West', the two magnificent steamers of the Northern Steamship Co. (each 386 ft. long, of 5000 tons burden, and accommodating 500 passengers), leave Buffalo (wharf at foot of Main St., Pl. C, 8) every Wed. and Sat. in summer at 8 p.m. (Central time). The 'North Land' goes through to Chicago, which it reaches on Sat. at 2 p.m.; the 'North West' goes to (3 days) *Duluth* (p. 393), and Chicago passengers must change at (1½ day) *Mackinac Island*. Through-fare to Chicago $13.50, berths extra (from $4½, to Mackinac from $3 up). Luggage up to 150 lbs. is free. Fares to *Cleveland*, $2.50; to *Detroit*, $4.75; to *Mackinac Island*, $9; to *Sault-Ste-Marie*, $11½; to *Duluth*, $18 (berth from $4½). Meals à la carte. Passengers may also book on the American plan (inside rooms only); inclusive fare to Chicago from $25, to Duluth from $30, other places in proportion. These steamers are admirably appointed in every way and afford most comfortable quarters. The Northern S.S. Co. works in connection with the Great Northern Railway and offers a large choice of circular and other tours by land and water. — Chicago passengers on the 'North West' remain over night at Mackinac Island and on the following day take the steamer 'Manitou' (3000 tons) of the Northern Michigan Transfer Co., which reaches the 'Windy City' in one day more

(from Buffalo 2½ days; meals on 'Manitou' à la carte, berth from $ 1). As the 'Manitou' does not call at *Milwaukee*, passengers for that city are sent on from Chicago by the GOODRICH LINE without extra charge.

The steamers of the ANCHOR LINE ('Tionesta' and 'Juniata' the best) leave Buffalo (dock at foot of Evans St., Pl. C 7) once or twice weekly between May 1st and Oct. 1st for *Duluth*, which they reach in about 4⅓ days (through-fare, including berth and meals, $ 35). They leave at 11 p.m. (open to passengers after 5 p.m.) and call at *Erie*, *Cleveland*, *Detroit*, *Mackinac Island*, *Sault-Ste-Marie*, *Marquette*, and *Portage Lake* (*Houghton* and *Hancock*). At Mackinac Island they connect with steamers for *Milwaukee* and (1 day) *Chicago* (through-fare from Buffalo $ 25, incl. meals and berth on Anchor Line steamers only).

Even if he has not time for the whole voyage, the traveller who is wearied of railway-travelling may be glad to make part at least of the distance by water. Stop-over checks are given by the Purser to first-class passengers on application. Warm wraps should be taken even in midsummer.

In 1907 the total burden of the vessels entering and clearing the ports of the Great Lakes in the domestic trade amounted to nearly 100,000,000 tons. New vessels are built annually with a burden of about 150,000 tons. Comp. pp. 353, 359.

Buffalo, see p. 136. The steamer plies to the W. through **Lake Erie** (see p. 137). The following are the points usually called at by the Anchor Line, and ample time to go ashore is generally allowed (consult the captain). [The vessels of the Northern S.S. Co. touch at Cleveland and Detroit only before reaching Mackinac.]

80 M. **Erie**, see p. 187. Hither Commodore Perry brought his prizes after defeating the English fleet in 1813. — The steamer now runs near the well-wooded shore, passing *Ashtabula* (p. 353).

175 M. **Cleveland** (p. 356), one of the most beautiful cities on the great lakes, is seen to advantage from the steamer. The *Garfield Memorial* (p. 355) is conspicuous as we approach. Several hours are usually spent here. — Then the coast becomes more picturesque. *Sandusky* (p. 356) is the chief place passed before we leave Lake Erie. The *Put-in-Bay Islands*, near the mouth of the Detroit, are a favourite summer-resort (several hotels).

Detroit River, which we ascend on leaving Lake Erie, is 25 M. long and varies in width from 4 M. at its mouth to ½ M. opposite Detroit. It generally presents a very animated scene (comp. p. 359).

285 M. **Detroit**, see p. 358.

We now pass *Belle Isle* (p. 361) by the Canadian channel and soon enter **Lake St. Clair** (530 ft.), a shallow lake, 25 M. in diameter and about 20 ft. deep. The intricate navigation of the shallow upper end is avoided by a canal 1½ M. long. The lake is connected with Lake Huron by the *St. Clair River*, a strait 40 M. long.

355 M. **Port Huron**, see p. 364. Opposite, on the Canadian shore, lies *Sarnia* (p. 364). We pass above the tunnel mentioned at p. 364. Between *Fort Gratiot* and *Fort Edward*, just above Port Huron, the strait narrows to 330 yds.

Lake Huron, which we now enter, is 250 M. long, 50-200 M. wide, 23,800 sq. M. in area, 580 ft. above the sea, and 300-1700 ft.

deep. It contains about 3000 islands, and is often visited by violent storms. The steamer makes no stop before reaching —

620 M. **Mackinac Island**, where passengers for Chicago often have to change steamers see p. 362). Those who wish to go on at once take the steamer 'Manitou', which makes close connection with the Buffalo boats; but there are several other steamers plying regularly between Mackinac Island and Chicago.

The steamer on which we have been travelling hitherto (with the exception of the 'North Land') goes on through the beautiful *St. Mary's River* (65 M. long), connecting Lakes Huron and Superior, to (695 M.) **Sault-Ste-Marie** (p. 397). Thence it traverses Lake Superior to (1065 M.; 3-5 days from Buffalo according to steamer) **Duluth** (p. 393), as described in the reverse direction in R. 56b.

The Chicago steamer passes through the *Straits of Mackinac* (p. 362) and enters **Lake Michigan** (590 ft. above the sea), the largest lake within the United States (360 M. long, 108 M. wide; greatest depth 900 ft.). Some of the steamers call en route at —

360 M. (980 M. from Buffalo) **Milwaukee** (p. 381), about 16 hrs. from Mackinac, but the 'Manitou' (comp. p. 364) goes direct to Chicago. — 450 M. (1070 M.) *Chicago* see below.

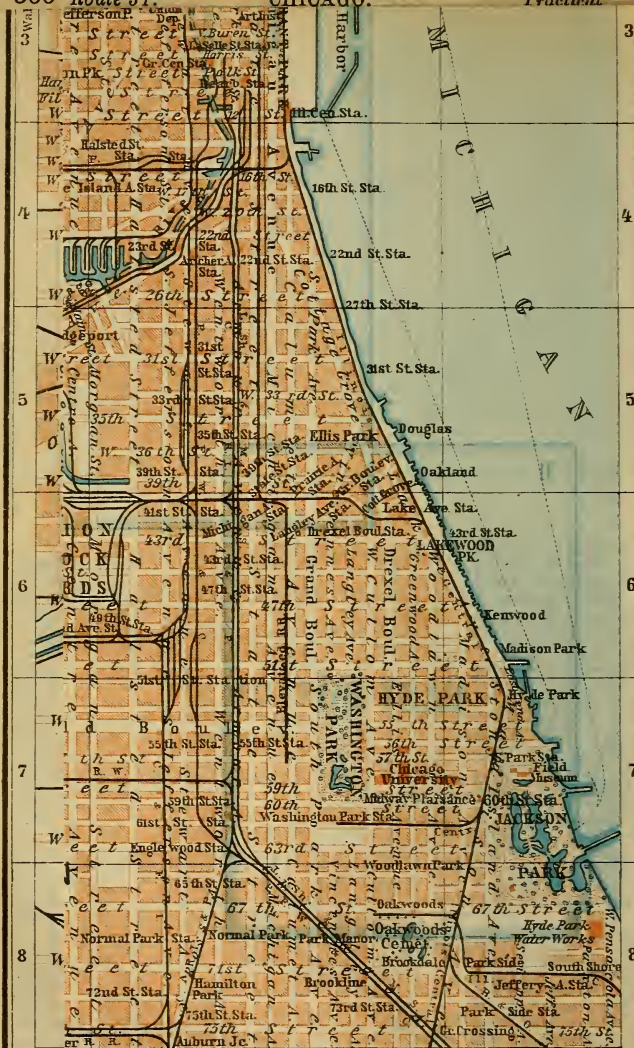
51. Chicago.

Plans. In the subjoined *General Plan* of Chicago (scale 1:100,000), referred to as Gen. Pl., clearness is aimed at by the omission of some of the streets. *Plans I & II* (pp. 371, 377) show the most important part of the city, adjoining the lake-front, on a somewhat larger scale (1 : 33,330). *Plan III* (p. 374) shows the heart of the business section on a scale of 1 : 12,000. — The lack of street-signs at many of the corners is inconvenient.

Railway Stations. *Illinois Central R. R.* (Pl. G, 3; *I*), at the S. end of Grant Park, also used by the C. C. C. & St. L., the C. C. & L., the Wisconsin Central, and the M. C. R. R. (suburban stations at the foot of Randolph St., Pl. G 3, *I*, and at the foot of Van Buren St., Pl. G 3, *I*, the latter underground); *Canal St. Union Depot* (Pl. F, 3; *I*), for the C. & A., C. B. & Q., C. M. & St. P., P. C. C. & St. L., and P. Ft. W. & C. R.R.; *Van Buren* or *La Salle St. Station* (Pl. F, 3; *I*) on the 'Union Loop' (p. 368), for the C. R. I. & P., the L. S. & M. S., the C. & E. I., and the N. Y. C. & St. L. R.R.; *Dearborn Station* (Pl. F, 3; *I*), cor. of Dearborn and Polk Sts., for the C. & G. T., A. T. & S. F., Erie, Chic., Indianapolis, & Louisville, and Wabash R.R.; *Grand Central Station* (Pl. F, 3; *I*), Harrison St., for the Chic. Terminal Transfer R.R. (belt line connecting with all the railways entering Chicago), the Pere Marquette System, the Chic. Gt. West. R.R., and the B. & O. R.R.; *Chicago & North-Western* (Wells St. Station; Pl. F, 3; *I*), cor. of Wells and Kinzie Sts., also used by the U. P. R.R. — *Cab* to the principal hotels, 1-2 pers. 50 c.; hack (1-2 pers.) $ 1 (comp. p. 368). *Parmelee's Omnibuses*, 50 c. each.

Hotels. a. *Central District.* La Salle Hotel (Pl. l, F 3; *III*), at the cor. of La Salle and Madison Sts., a huge house with 1100 rooms, to be opened in 1909. Auditorium (Pl. a, G 3; *I*), a large building in Michigan Avenue, facing the lake, with a very elaborate interior, $ 3½-5, R. $ 2-4; it is connected by a tunnel lined with white marble with the *Auditorium Annex (Pl. z, G 3; *I*), at the opposite corner of Congress St. and Michigan Ave., which is preferable in many ways to the Auditorium itself (beautiful Pompeian Room, with Tiffany Fountain). Congress Apartments (Pl. c, F G, 3; *I*), Michigan Ave., adjoining the Auditorium Annex and under the

AUSTIN
CRAGIN
W. Madison
Austin Sta.
LINDEN Sta.
Austin A Sta.
Chestnut St.
Elm St.
W. Chicago Avenue
Augusta
West Division Street
West North Avenue
Bloomingdale Ave.
Armitage Ave.
Galewood Sta.
Cragin Sta.
Fullerton Avenue
Wrightwood
Marvin Sta.
West Park Ave.
H
B
A
1
2


Harbor
MICHIGAN
Ill. Cen. Sta.
16th St. Sta.
22nd St. Sta.
27th St. Sta.
31st St. Sta.
Douglas
Oakland
Lake Ave. Sta.
43rd St. Sta.
LAKEWOOD PK.
Kenwood
Madison Park
Hyde Park
HYDE PARK
Chicago University
Midway Plaisance
Washington Park Sta.
Woodlawn Park
Oakwoods
Oakwoods Cemet.
Brookdale
Park Side
South Shore
Jeffery A. Sta.
Park Side Sta.
Gr. Crossing
Hyde Park Water Works
Ellis Park
Drexel Boul. Sta.
Grand Boul.
Drexel Boul.
WASHINGTON PARK
Halsted St. Sta.
Island A. Sta.
23rd St.
Archer A. Sta.
22nd St. Sta.
26th Street
31st Street
33rd St. Sta.
35th St. Sta.
39th St. Sta.
41st St. Sta.
43rd St. Sta.
47th St. Sta.
49th St. Sta.
51st St. Station
55th St. Sta.
59th St. Sta.
61st St. Sta.
Englewood Sta.
65th St. Sta.
67th Street
Normal Park Sta.
Normal Park
Park Manor
Hamilton Park
Brookline
72nd St. Sta.
73rd St. Sta.
75th St. Sta.
75th Street
Auburn Jc.
Jackson Park
Field Museum
Park Sta.
Cottage Grove
Langley Ave.
Greenwood Ave.
Cottage Grove Ave.
Wentworth Ave.
Michigan Ave.
Morgan St.
Halsted Street
Wentworth Ave.
Cottage Grove Ave.
Langley Ave.
Cullom Ave.
Ellis Ave.
Woodlawn Ave.
Madison Ave.
Stony Island Ave.
Jeffery Ave.
Pensacola Ave.
Wild Boulev.
Wagner & Debes Geog. Estab. Leipzig.

same management, R. from $ 2; WELLINGTON (Pl. e, G 3; *III*), cor. of Wabash Ave. and Jackson Boul., R. from $ 1½; VICTORIA (Pl. v, G 3; *III*), 194 Michigan Ave., cor. Van Buren St., $ 2½-5; STRATFORD (Pl. u, G 3; *III*), Michigan Ave., R. from $ 1½; GREAT NORTHERN (Pl. n, F 3; *III*), 237 Dearborn St., well spoken of, R. from $ 1; GRAND PACIFIC HOTEL (Pl. f, F 3; *III*), Jackson Boul., cor. S. Clark St., R. from $ 2; PALMER HOUSE (Pl. p, F G, 3; *III*), cor. of Monroe and State Sts., a large house, frequented by business-men and politicians, R. from $ 1½; SHERMAN (Pl. s, F 3; *III*), cor. Randolph & S. Clark Sts., from $ 2½, R. $ 1½-4; WINDSOR-CLIFTON (Pl. y, F G, 3; *III*), cor. of Monroe St. and Wabash Ave., R. $ 1-3; MAJESTIC. Quincy St., R. from $ 1; SARATOGA, 155 Dearborn St., R. from $ 1½; BRIGGS HOUSE (Pl. q, F 3; *III*), cor. of Fifth Ave. and Randolph St., R. from $ 1; GRACE, next door to the Union League Club (Pl. F. 3; *III*), R. from $ 1; BISMARCK (Pl. b, F 3; *III*), 180 Randolph St., R. $ 1-3; KAISERHOF, S. Clark St. (Nos. 274, 266), R. from $ 1; BREVOORT (Pl. t, F 3; *III*), Madison St., near La Salle St., R. from $ 1½; MORRISON (Pl. r, F 3; *III*), cor. Madison & Clark Sts., R. from $ 1; GAULT HOUSE (Pl. g, F 3; *I*), W. Madison St., $ 2-2½, R. from 75 c.; MCCOY'S (Pl. k, F 3; *III*), R. from $ 1. — b. *North Side.* VIRGINIA (Pl. i, F G, 2; *I*), Ohio & Rush Sts., R. from $ 1; ONTARIO (Pl. o, F 2; *I*), Ontario St., $ 2½-5. — c. *South Side.* *METROPOLE (Pl. m, G 4; *I*), Michigan Ave., cor. of 23rd St., R. from $ 1½; LEXINGTON (Pl. x, G 4; *I*), Michigan Ave., cor. 22nd St., from $ 2, R. from $ 1; CHICAGO BEACH (Pl. j, H 6; *II*), 51st St. and Lake Shore, from $ 3, R. from $ 1½; WINDERMERE (Pl. w, H 7; *II*), cor. of Cornell Ave. & 56th St., $ 4-6, these two, and especially the Windermere, conveniently situated for visitors to the University; HYDE PARK (Pl. h, H 6; *II*), cor. of 51st St. and Lake Ave., $ 2½-4; KENWOOD, cor. of 47th St. and Kenwood Ave.; DEL PRADO, on the Midway, between Madison and Washington Aves., near Jackson Park (Pl. G, H, 7; *III*), $ 2½-4. — *Board* may easily be obtained in any part of the town from $ 5 to $ 15 per week.

Restaurants. **Auditorium Annex*, with café in the Pompeian Room (p. 366), much frequented after the theatre; **De Jonghe*, 45 Monroe St.; *Rector*, cor. of Monroe St. and Clark St. (fish, etc.; frequented by actors); **Wellington Hotel*, **Stratford Hotel* (with handsome Dutch Room), *Sherman Hotel*, see above; *Abson's Chop House*, 125 La Salle St.; *Tip Top Inn*, 9th floor of Pullman Building; *Savoy*, cor. of Harrison St. & Wabash Ave.; *Kuntz-Remmler*, 303 Wabash Ave.; *St. Hubert's*. on the top floor of the Majestic Hotel (see above; grill room); *Hofbräu*, 118 Monroe St.; *Union*, 109 E. Randolph St.; *Bismarck* (see above); *Vogelsang*, 178 Madison St.; *Schlogl*, 109 Fifth Ave., between Madison St. and Washington St. (for men); *Mangler*, 119 La Salle St. (for men); *Edelweiss*, 105 Madison St.; *Gallauer*, cor. of N. Clark St. & Germania Pl.; *Gunther's Luncheon Rooms*, 212 State St., for ladies; *Kohlsaat's Luncheon Rooms*, 196 Clark St., 59 Washington St., etc.; *John R. Thompson's Restaurants*, 355 and 397 State St., 165 Adams St., etc.; *Henrici*, 108 Randolph St.; *Café Berlin*, 76 State St.; *Seaver*, 86 State St.; also at most of the other hotels and at *Marshall Field's* and other large department stores; **King Joy Lo*, Chinese restaurant, 100 Randolph St.; *Hung Fong Lo Co.* (Chinese), 278 State St. — BEER SALOONS: *Stein, Kretschmar*, N. Clark St. (Nos. 649, 625). — WINE ROOMS: *Jansen*, 163 Washington St.; *Wilken*, 49 La Salle St. (Californian wines); *Berkes*, 75 Dearborn St.

Elevated Railroads (similar to those of New York, p. 15; electric motors; uniform fare 5 c.). 1. *South Side Rapid Transit* to Jackson Park (Pl. H, 7, 8; *II*), with branches from the station at cor. 40th St. and Indiana Ave. (Pl. F G, 5, 6; *II*) to the Stockyards, to Englewood (Gen. Pl. F, 7), and to 42nd St. and Lake Ave. (Pl. G, H, 6; *II*). — 2. *Metropolitan West Side* along W. Van Buren St. (Gen. Pl. D-F, 3) and Harrison St. (Gen. Pl. A-F, 3) to 48th St. Station (Gen. Pl. B, 3), with branches to the N. and S. — 3. *Lake Street* along Lake St. (Pl. E, F, 3; *II*) to 52nd St. and on to Oak Park. — 4. *North Western* along Fifth Ave. (Pl. F, 3; *I*) and Wells St. to Buena Park and Wilson Avenue. — In the 'Down Town District' the four companies use a common track, known as the *Union Loop*, running along Wabash Ave. from Van Buren St. to Lake St., along Lake St. to Fifth Ave., along Fifth Ave. to Van Buren St., and so back to its starting-point.

Tramways (electric) traverse the chief streets and run to suburban points (fare 5c.). Cars stop at the farther street-crossings or at other places indicated by signs. — *Parmelee's Omnibuses* run between the hotels and railway-stations (50 c.).

Cabs. With one horse: 1-2 pers. per mile 50c., each addit. mile or person 25 c.; per hr. (1 or more pers.), $ 1. With two horses *(Hacks):* 1-2 pers. 1 M. $ 1, 2 M. $ 1½, each addit. pers. 50 c., per hr. $ 2, each addit. hr. $ 1½, per day $ 8-10. Ordinary baggage free; if weight exceeds 75 lbs., 15 c. per package. Each vehicle is bound to exhibit a tariff inside, but it is well to come to a clear understanding beforehand. — *Taxicabs* with fares as at New York (p. 19).

'Seeing Chicago' Automobiles (comp. p. 19), starting near the Federal Building (p. 373), make frequent trips through the city (fare $ 1).

Steamers ply from Chicago to all points on the Great Lakes. Among the chief lines are the *Goodrich*, the *Lake Michigan & Lake Superior Transportation Co.*, the *Northern Michigan Transfer*, the *Northern*, the *Anchor*, and the *Graham & Morton Transportation Co.* Steamers to *Milwaukee* (p. 381) run 2-3 times daily. Small steamers ply frequently (esp. on Sun. and holidays) to *Jackson* and *Lincoln Parks* (p. 376), and larger ones to *St. Joseph* ('*St. Joe*'; Mich.), *South Haven* (Mich.; $ 1; p. 363), and other points. The steamboat wharves are mainly along the river, within ½ M. of its mouth.

Theatres and Places of Amusement. *Auditorium Theatre* (Pl. a, G 3; *III*), Congress St. (comp. p. 370), splendidly fitted up and accommodating 4-5000 people (used on Sun. for preaching services by *Rev. Dr. Gunsaulus*, p. 379); *Powers Theatre* (Pl. F, 3; *III*), Randolph St.; *Colonial Theatre*, 81 Randolph St.; *Illinois* (Pl. G, 3; *III*), 22 Jackson Boulevard; *Majestic* (p. 375); *Grand Opera House* (Pl. F, 3; *III*), Clark St.; *Garrick Theatre* (Pl. F, 3; *III*), Randolph St., built by Sullivan, the architect of the Auditorium; *Studebaker*, in the Fine Arts Building (Pl. G, 3; *III*); *McVicker's Theatre* (Pl. F, 3; *III*), Madison St.; *Great Northern Theatre* (Pl. n, F 3; *III*), Jackson St., near Dearborn St.; *Academy of Music*, S. Halsted St.; *Chicago Opera House* (vaudeville; Pl. F 3, *III*), 118 Washington St.; *Olympic* (Pl. F, 3; *III*), *Haymarket*, vaudeville performances; *International Theatre*, cor. of Wabash Ave. & Hubbard Court. — *Coliseum*, Wabash Ave., near 14th St., for concerts and exhibitions. — Amusement Parks, with concerts, etc.: *White City*, cor. of 63rd St. and S. Park Ave. (Pl. G, 7; *II*); *Forest Park*, cor. of Harrison St. and Desplaines Ave., 10 M. to the W. of the City Hall; *Sans Souci*, cor. of 60th St. and Cottage Grove Ave. (Pl. G, 7; *II*); *Ravinia Park*, ca. 20 M. to the N. of Chicago, reached by train or electric car; *Chutes Park*, in the W. Side; *Riverview*, Western, Belmont, and Clybourn Aves., 5 M. to the N.W. of the City Hall. — The **Chicago Orchestral Concerts*, organized by the late Theodore Thomas and now directed by Frederick A. Stock, are held in the building of the Chicago Orchestra Association (p. 371).

Post Office (Pl. F, 3; *I*), in block bounded by Adams, Dearborn, Jackson, and Clark Sts.; general delivery open day and night, on Sun. 11-1.

Booksellers. *McClurg*, 215 Wabash Ave.; *Frank M. Morris*, 171 Madison St. and 152 Wabash Ave.

Consuls. British, *Mr. Alexander Finn*, 605 Pullman Building; German Consul-General, *Dr. Walther Wever*, 1150 First National Bank Building.

Tourist Agents. *Raymond & Whitcomb Co.*, 108 Adams St.; *Thos. Cook & Son*, 234 S. Clark St.

Chicago (pron. *Shĭkâwgo;* 590 ft. above the sea, 15-75 ft. above the lake), the second city and largest railway-centre of the United States, is situated on the S.W. shore of *Lake Michigan* (p. 366), at the mouths of the rivers *Chicago* (p. 372) and *Calumet*. It is 850 M. from Baltimore, the nearest Atlantic port, and 2415 M. from San Francisco. It covers an area of 190 sq. M., and in 1900 contained 1,698,575 inhab. (on Jan. 1st, 1907, estimated pop. 2,079,841). The city has a

water-front on the lake of 26 M. and is divided by the Chicago River and its branches into three portions, known as the *North*, *South*, and *West Sides*. The site of the city is remarkably level, rising very slightly from the lake; and its streets are usually wide and straight. Among the chief business-thoroughfares are *State*, *Clark*, *Madison*, *Randolph*, *Dearborn*, and *La Salle Streets*, and *Wabash Avenue*. Perhaps the finest residence streets are *Prairie* and *Michigan Avenues* and *Drexel* and *Grand Boulevards*, on the S. side, and *Lake Shore Drive*, on the N. side.

It is estimated that not more than 350,000 of the inhabitants are of native American parentage; about 550,000 are Germans, 250,000 are Irish, 225,000 Scandinavians, 160,000 Poles, 110,000 Bohemians, 40,000 Italians, 60,000 Canadians, and 100,000 English and Scottish. 'In Chicago there are some 14 languages, besides English, each of which is spoken by 10,000 or more persons. Newspapers appear regularly in 10 languages, and church-services may be heard in about 20 languages. Chicago is the second largest Bohemian city of the world, the third Swedish, the third Norwegian, the fourth Polish, the fifth German. In all there are some 40 foreign languages spoken by numbers ranging from half a dozen to half a million. (*Prof. C. D. Buck*, in 'Decennial Publications of the University of Chicago'; 1903.) At least one factory has to print its rules in eight languages.

History. The growth of Chicago has been phenomenal even among American cities. The river *Chicago* (the Indian *Checagua*, meaning 'wild onion' and 'pole-cat') was, indeed, visited by the Frenchmen Joliet and Marquette in 1673, but it was not until 1804 that the United States Government erected *Fort Dearborn*, the first permanent settlement in the swamp that was afterwards Chicago. The garrison of the fort was massacred by Indians in 1812, but the fort was rebuilt and re-occupied two years later. In 1831 the little village contained about 100 inhab. and in 1837 it had attained to the dignity of an incorporated city and a population of 4170. In 1850 its population had increased to 29,963, and its commercial enterprise had begun to attract attention. A signal instance of the energy of the citizens was given in 1855, when the level of the entire city was raised 7 ft., huge buildings being elevated bodily without interruption to business. By 1860 its population was almost quadrupled (109,206), while its trade in breadstuffs had increased tenfold. By 1870 Chicago contained 306,605 inhab., and had become one of the leading commercial centres of the New World. In 1871 (Oct. 8-10th) the flourishing city was the scene of a terrible conflagration, which originated in the W. side (at No. 137 De Koven St.; Pl. F, 3, *I*), crossed to the N. of the river, swept over an area of $3^1/_2$ sq. M., destroyed 17,500 buildings and property to the value of nearly $ 200,000,000 (40,000,000*l*.), and left 100,000 people homeless. About 200 people perished in the flames. The recovery from this disaster was rapid and complete; and in a few years the only trace of it was the improved character of the streets and buildings. The fire found Chicago of wood and left it of brick and stone. In 1880 the population was 503,185, in 1890 it was 1,099,350. — Great injustice is done to Chicago by those who represent it as wholly given over to the worship of Mammon, as it compares favourably with many American cities in the efforts it has made to beautify itself by the creation of parks and boulevards and in its encouragement of education and the liberal arts (comp. pp. 371, 372, 375, etc.). Among the private collections of art and literature may be mentioned those of *Mr. Martin A. Ryerson*, *Mr. C. L. Hutchinson*, *Mr. R. Hall McCormick* (British portraits), *Mrs. Potter Palmer*, *Mr. Frank G. Logan* (paintings of the Barbison and other French schools) and *Mr. C. F. Gunther* (rare books, prints, portraits, and MSS.; autograph of Molière; alleged autograph of Shakspeare; MSS. of Tennyson's 'Maud' and Swinburne's 'Atalanta in Calydon'). No other one event has stimulated Chicago's higher activities so much as the holding within its borders in 1893 of the World's Columbian Exhibition, celebrating the four-hundredth anniversary of the discovery of America by Columbus. — Chicago has

long been the favourite meeting-place of the conventions held by the great political parties to nominate candidates for the office of President. Lincoln (1860), Grant (1868), Garfield (1880), Cleveland (1884 and 1892), Harrison (1888), Roosevelt (1904), and Taft (1908) were all nominated here.

Commerce and Industry. The trade of Chicago is second to that of New York alone among American cities, and in 1900 amounted in value to 2000 million dollars (400 millions sterling). The staples are grain, lumber, live-stock, and packed meat, in which branches it is the largest market in the world. The value of its manufactures in 1905 was $ 955,000,000 (191,000,000*l.*), including iron and steel wares, agricultural implements, railway-cars, textiles, leather, beer, spirits, chemicals, etc. The annual tonnage of vessels entering Chicago Harbour is about 8,000,000. — Among the leading industrial establishments may be mentioned the *Illinois Steel Co.*, which has three plants in different parts of the city (including the largest rolling mills in the world at South Chicago, covering 334 acres), has a capital of $ 35,000,000 (7,000,000*l.*), and employs 10,000 men; and the *International Harvester Co.*, comprising the *McCormick Works* in the S.W. part of the city (230 acres and 7000 hands), the *Deering Harvester Co.'s* works in the N.W. part of the city (Gen. Pl. E, 1; 76 acres of ground and 4800 men), and the *Weber Works* (15 acres; 500 employees), in the S. part of the city. The International Harvester Co. produces annually about 730,000 farm machines and wagons and 50,000 tons of binder twine. It also owns steel mills at S. Chicago (93 acres, 1500 men), where steel is made and rolled for the above-mentioned plants of the Company. Mention must also be made of the *Chicago Cold Storage Exchange.* Comp. also p. 379.

Architecture. Chicago has become identified with the erection of enormously tall office-buildings, the upper stories of which are made accessible by rapid-running elevators. The architectural beauty of these is often questionable, but no one can fail to admire the wonderful skill of their architectural engineering. These 'sky-scrapers' are now erected on the 'steel-frame system', the walls affording no support to the edifice but merely forming a kind of veneer to the actual structural frame. The interiors are often admirably fitted up and adorned (comp. p. xc). — Engineers will also be interested in the *Waddell Lift Bridge*, over the S. branch of the Chicago River, at S. Halsted St., near 24th St. (Pl. F, 4; *I*), which can be lifted, by means of pulleys and counter-weights, to a height of 155 ft., above the channel. It is not considered by any means so successful as the rolling lift or bascule bridges in other parts of the city. — An extensive system of subways or tunnels has been constructed under the streets of the crowded districts for the handling of freight by electricity. The development of this system is expected to work a revolution in the city's streets.

The visitor to Chicago cannot, perhaps, better begin his examination of the city than by ascending to the top of the *Tower* (270 ft. high; adm. 25 c.) of the *Auditorium (Pl. G, 3; *III*), which affords a splendid view. This huge building, erected by *Adler & Sullivan* in 1887-89 at a cost of $ 3,500,000, includes a large hotel (p. 366) and a handsome theatre (p. 368; 4200 seats). The longest front of the building, towards Congress St., is 360 ft. — The *Fine Arts* or *Studebaker Building* (Pl. G, 3; *III*), adjoining the Auditorium, is one of the show buildings of Chicago, but, though in several respects not unworthy of its situation, it is too palatial in character to fairly represent the severity of this city's commercial architecture *(Schuyler).* It has deservedly been described as the focus of the artistic and intellectual life of Chicago, containing as it does a theatre, concert, assembly, and lecture rooms, studios of leading artists, and the meeting-places of several clubs. — The beautiful Romanesque build-

Ore gon Ave
Macalister Pl.
VERNON PK
Arthington St.
Gurley St.
Hope St.
Hull Ho.
Sebor
Mather
Ewing
Forquer
Gr. Cen. Sta.
Harvester Pl.
Hubbard Pl.
Dearborn Sta.
Polk St.
Loop Sta.
UNION STOCK YARDS
Private St.
Exchange Ave.
W. 11 St. St.
W. 40th Pl.
F
G
0 ¼ ½ 1 Mile
1 : 33330
0 ½ 1 1½ Kilom.

ing to the N. of the Fine Arts Building is the *Chicago Club* (Pl. G, 3; *III*). A little farther to the N., at the corner of Jackson Boulevard, is the tall *Railway Exchange Building* (Pl. G, 3; *III*), erected in 1903-4 and cased in tiles. Next to this on the N. is the new building of the *Chicago Orchestra Association* (concerts, see p. 368), on the roof of which is the house of the 'Cliff Dwellers', a new literary and artistic club. — A little to the S. of the Auditorium, at the corner of Harrison St., is the *Harvester Building* (16 stories; Pl. F G, 3, *I*), erected in 1970.

All these buildings face upon Michigan Avenue and **Grant Park** (Pl. G, 3; *I*), the latter consisting of a public pleasure-ground of 210 acres abutting on Lake Michigan. The park is as yet in a somewhat inchoate condition, but has been improved of late by the depression of the tracks of the Illinois Central Railway and by the construction of massive stone viaducts connecting the park proper with the lake-shore. The adjoining part of the lake, between the shore and the breakwater, has been filled in and added to the park. In Grant Park, $^1/_3$ M. to the S. of the Auditorium and opposite Eldredge Place, is an **Equestrian Statue of Gen. John A. Logan* (1824-86; Pl. G 3, *I*), in bronze, by Aug. Saint-Gaudens (1897). The general is represented as rallying his troops before Atlanta.

Grant Park will probably be the site of *Lorado Taft's* "Fountain of the Great Lakes', the first fruits of a bequest of $ 1,075,000 made by Mr. S. Ferguson (d. 1905) for the embellishment of Chicago by works of sculpture. The new *Field Museum* (comp. p. 377) and a seated statue of *Lincoln* by Saint-Gaudens, are also to be located here.

A little farther to the S. is the *Illinois Central Station* (Pl. G, 3; *I*), an admirable railway terminal building.

Following Michigan Ave. towards the N. from the Auditorium, we soon reach (right) the **Art Institute of Chicago* (Pl. G, 3; *I*), an imposing building in a semi-classical style, erected from the plans of *Charles A. Coolidge* in 1892-93. It contains valuable collections of paintings, sculpture, and other objects of art, and also the largest and most comprehensive art school in America (3500 students). All the objects are provided with explanatory labels. The collections are open daily, 9-5 (Sun. 1-5); adm. 25 c., free on Wed., Sat., and Sunday. The annual number of visitors is about 600,000. Director, *W. M. R. French*. Catalogue 15 c.

The Basement Floor is devoted to school-rooms and work-rooms.

Main Floor. Rooms 1-5, 8, 10, and 12, contain the *Elbridge G. Hall Collection* of Casts of Ancient and Modern Sculpture. There are also a few original modern works in R. 12. — Room 6 contains the **Higginbotham Collection* of Reproductions of Bronzes at Naples. — Room 11 contains old French sculpture. — Room 13 holds musical instruments. — Room 15 contains a small but good collection of scarabæi, beads, and other Egyptian antiquities, and also Greek vases, glass, and terracottas. — Room 16 contains oil-paintings. — Room 20, at the back, is Blackstone Hall, a gallery over 200 ft. long, containing the *Blackstone Collection* of Architectural Casts, chiefly of French subjects. — Room 18 is the *Fullerton Lecture Hall* and Room 21 is the *Ryerson Library of Fine Art*.

On the Upper Floor are paintings, textiles, and Japanese objects. — Room 38 (to the right at head of staircase). *Field Memorial Collection of*

Paintings, chiefly of the Barbison School: *131. *Millet*, Bringing home the new-born calf; 136. *Troyon*, Returning from market; landscapes by *Corot* (108), *Cazin* (104), and *Constable* (111); 118. *Detaille*, Mounted officer; 101. *Breton*, Song of the lark. — Room 39 *(Stickney Room)* contains paintings by modern masters, including examples of *Whistler* (343), *Millet* (1004), *Fantin-Latour* (390. Portrait of Edouard Manet), *W. M. Chase* (288), and *George De Forest Brush* (Family group). — Room 40. *Munger Collection*, with paintings by *Meissonier* (174), *Gérôme*, *Michetti*, *Munkácsy*, *Troyon*, *Fromentin*, and *Faed*. — Room 41 contains the *Nickerson Collection* of Japanese Bronzes, Porcelains, etc. — Room 42. Nickerson Collection of Jades and Crystals; also Modern French and American Paintings, including specimens of *Couture*, *C. H. Davis*, *Michel*, *Ribot*, *Wyant*, and *Neal*. — Room 44. Nickerson Collection of Water-colours and Engravings. — Rooms 43 and 45. Textiles and Decorative Art. Room 45 also contains an *Assumption by *El Greco* (*Theotocopuli*) and a Betrayal of Christ by *Lucas Cranach the Elder*. — Hutchinson Gallery (to the left of head of staircase) contains the most valuable works in the Institute, including examples of *Rembrandt* (°Portrait of a girl; 1645), *A. van Ostade* (°Golden wedding), *Jan Steen* (Family concert), *Hobbema* (°Water-mill), *J. van Ruysdael* (Castle), *A. van de Velde* (Meadow with cattle), *Frans Hals* (°The artist's son, a late work), *D. Teniers* (Guard-room), *Terburg* (Guitar-lesson), *Rubens* (Spinola), and *Van Dyck* (portrait). Thirteen of the most important works in this room were bought in 1890 from the famous Demidoff Collection at Florence. — Room 31. Modern Paintings. — Room 33 contains the *Arundel Collection* of chromo-lithographic reproductions of the works of the Old Masters. — Room 29 contains original drawings for illustrations in the 'Century Magazine'. — Rooms 25-30 are occupied by temporary exhibitions, varied from time to time. — Rooms 35 and 37 contain sculptures in marble and bronze, chiefly original, and other objects. — Room 46. Porcelain and other pottery, medals, and small metal work. — Room 47. Larger metal work, and the *Rosenbaum Collection* of ivory carvings (11-19th cent.) by Italian, German, French, English, and Oriental artists (164 pieces).

Farther to the N., on the opposite side of Michigan Ave., are the buildings of the *Illinois Athletic Club* (Pl. G, 3; *III*), the **University Club* (Pl. G, 3; *III*), and the *Chicago Athletic Club* (Pl. G, 3; *III*). At the corner of Madison St. is the *Montgomery Ward Building*, with its tower, and a little farther up, at the corner of Washington St., is the **Chicago Public Library** (Pl. G, 3; *III*), an imposing building in a classical style, designed by *Shepley*, *Rutan*, *& Coolidge*, and erected in 1893-97 at a cost of $2,000,000. This fine edifice is worthy to rank with the Library of Congress (p. 216) and the Boston Public Library (p. 264). The main entrances are to the N. and S., in Randolph St. and Washington St. The interior is sumptuously adorned with marble, mosaics, frescoes, and mottoes. It contains 350,000 volumes. On the first floor (N. end) is a large *Memorial Hall*, used by the Grand Army of the Republic and covered by a dome; it contains an interesting collection of Civil War and other historical relics.

In accordance with an agreement made with the Newberry and Crerar libraries (see p. 378) the Chicago Public Library devotes itself chiefly to the maintenance of a general reference collection, combined with a circulating department of popular works.

On the N., Michigan Ave. ends at the *Chicago River*. Fort Dearborn (pp. 369, 376) stood to the left, on the river, at the end of the avenue (tablet at the corner of River St.).

The *Chicago River* (comp. p. 369), a narrow and uninviting-looking stream, has a frontage within the city of nearly 60 M., of which one-third

is navigable. The river is crossed by numerous bridges and undermined by three tunnels, traversed by tramway-lines. The depth of the river is to be increased from 16 ft. to 21 ft. or more, and the tunnels are now being lowered to this end. As Chicago derives its drinking-water from Lake Michigan (see p. 376), the disposal of the river-drainage was long a serious problem, until solved by the construction of the ***Drainage Canal**, a wonderful feat of sanitary engineering. This canal, completed in 1900 at a cost of $ 43,000,000, begins at the S. branch of the Chicago River in Robey St. and extends to (28 M.) Lockport (p. 400), where it discharges the sewage of Chicago into the Desplaines River and so ultimately into the Illinois River, a tributary of the Mississippi. This enormous sewer reverses the natural course of the river, and is flushed by about 300,000 cubic feet of water per minute drawn from Lake Michigan. The canal is also used by shipping. — There is an external breakwater, 1 M. long, to shelter the mouth of the river.

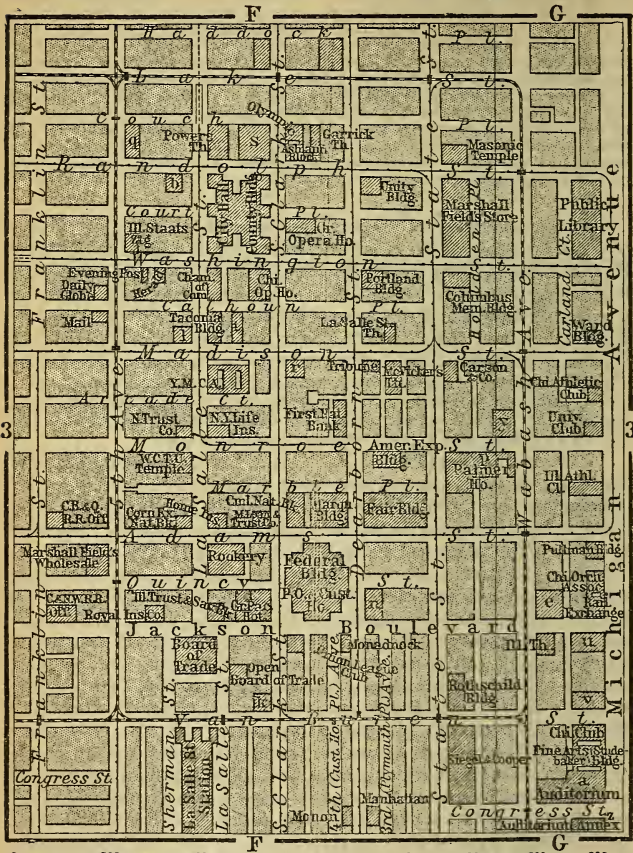
To see something of the business-quarters of Chicago, we may now follow *Randolph St.* (see Pl. F, G, 3; *III*) to the W. to the ***City Hall** and the ***County Building** (Pl. F, 3; *III*), two large adjoining buildings. The latter has just been rebuilt by *Holabird & Roche* in a modern classical style with huge Corinthian columns, at a cost of $ 5,000,000, and the former is also to be rebuilt in a similar style. On the groundfloor of the City Hall (N.) are the headquarters of the *Fire Department* (1550 men) and of the *Police Force* (3600 men).

About ½ M. to the N. of the City Hall, in Dearborn Ave., between Michigan St. and Illinois St., stands the **Criminal Court and County Jail** (Pl. F, 1), a huge and gloomy structure erected in 1896.

La Salle Street (Pl. F, 3; *III*), leading to the S. from the County Building, contains some of the finest office-buildings in the city. Among these are the *****Chamber of Commerce* (14 stories; Pl. F 3, *III*), at the corner of Washington St. (left); the *Tacoma Building* (13 stories; Pl. F 3, *III*), at the corner of Madison St. (left); the *Y. M. C. A. Building* (13 stories; Pl. F 3, *III*), a little farther to the S. (left); the *New York Life Insurance Building* (12 stories; left; Pl. F 3, *III*), the low but impressive *Northern Trust Co. Building* (right; Pl. F 3, *III*), and the oddly shaped *Women's Temperance Temple* (13 stories; r.; Pl. F 3, *III*), all three at the corners of Monroe St.; the new granite building of the *Corn Exchange National Bank* (17 stories; r.; Pl. F 3, *III*); the *Home Insurance Co. Building* (11 stories; l.; Pl. F 3, *III*); and the *****Rookery* (10 stories; l.; Pl. F 3, *III*), these three at the corners of Adams St. (left). The interior (600 rooms) of the last, lined with white marble, is worth inspecting, and visitors should ascend by one of the 'express' elevators to the rotunda at the top. Farther on in La Salle St., at the corner of Jackson Boulevard, is the *Illinois Trust & Savings Bank* (left; Pl. F 3, *III*), a massive two-storied edifice, with a fine central court (worth visiting). Below are the safety deposit vaults. At the end of La Salle St. stands the granite building of the **Board of Trade** (Pl. F, 3; *III*). Visitors are admitted to the gallery (business-hours, 9.30-1.15).

Jackson Boulevard (Pl. F, G, 3; *III*) leads hence to the E. to the ***Federal Building,** containing the *Post Office & Custom House*

(Pl. F, 3; *III*) and occupying an entire block. It is in the Corinthian style, with a large central dome, 200 ft. in height, occupied by the



CHICAGO III: BUSINESS QUARTER.

U. S. Signal Service. The foundations consist of huge columns of iron and cement, resting on the bed-rock. The Postmaster's Room contains portraits of all the Postmasters of Chicago. — Close by are fiv very

large buildings (16 stories): the *Great Northern Hotel* (Dearborn St., Pl. n, F 3, *III*), the *Fair Building* (occupying an entire block; Pl. F 3, *III*), the **Marquette Building*, opposite (17 stories; Pl. F 3, *III*); the **Commercial National Bank Building* (Adams and Clark Sts.; 19 stories; Pl. F 3, *III*), and the *Monadnock* (Jackson Boul.; Pl. F 3, *III*). Adjoining the last is the *Union League Club* (Pl. F 3; *III*).

Dearborn Street (Pl. F, 3; *III*), leading hence to the S., is also lined with 'sky-scrapers'. To the right, at the corner of Van Buren St., is the *Fisher Building* (18 stories), and opposite is the *Old Colony Building* (16 stories). Farther to the S. are the *Manhattan* and *Monon* buildings (16 stories; Pl. F 3, *III*).

We may now follow Van Buren Street (Pl. F, G, 3; *III*) to the E. (left) to State Street (Gen. Pl. F, 2-8), at its intersection with which are the large 'department stores' of *Siegel & Cooper* (Pl. F, 3; *III*) and *A. M. Rothschild* (Pl. F, 3; *III*). Following State St. to the left (N.), we pass the department store of *Carson, Pirie, Scott, & Co.* (Pl. F, 3; *III*), one of the most dignified business-structures in Chicago; the *Columbus Memorial Building* (14 stories; Pl. F 3, *III*), at the corner of Washington St. (right), occupied almost entirely by physicians; the *Retail Store of Marshall Field & Co* (Pl. F, 3; *III*), the Whiteley's of Chicago, extending from Washington St. to Randolph St. (r.; 1,520,000 sq. ft. of floor-space; 8000 employees); and the tall *Masonic Temple* (21 stories; Pl. F 3, *III*), at the opposite corner of Randolph St. (r.; view from top, 25 c.).

Among other buildings of interest in this Business Quarter are the *Unity Building* (18 stories; Pl. F 3, *III*), Dearborn St., near Randolph St.; the *Tribune Building* (Pl. F, 3; *III*) at the corner of Dearborn and Madison Sts; the *Rand-McNally Building*, in Adams St., near La Salle St., a large publishing and printing house (700 hands; built almost entirely of steel); the *General Offices of the Chicago, Burlington, & Quincy Railroad* (Pl. F, 3; *III*), Adams St., cor. Franklin St.; the **Wholesale Establishment of Marshall Field & Co.* (Pl. F, 3; *III*), Adams St., designed by H. H. Richardson ('one of the most individual examples of American commercial building'; in it 'the vulgarity of the commercial palace is gratefully conspicuous by its absence, and it is as monumental in its massiveness and durability as it is grimly utilitarian in expression'); the *Royal Insurance Co.* (Pl. F, 3; *III*), Jackson Boul., nearly opposite the Board of Trade; the *First National Bank Building* (Pl. F, 3; *III*), cor. of Dearborn & Monroe Sts.; the *American Trust Building* (18 stories), cor. of Clark St. and Monroe St. (Pl. F, 3; *III*), showing a peculiar and interesting treatment of the sky-scraper; the *Pullman Building* (Pl. G, 3; *III*), cor. of Michigan Ave. and Adams St.; the *Ashland Block* (16 stories; Pl. F 3, *III*); the *Schiller Building* (*Garrick Theatre*; Pl. F 3, *III*); the *Chicago Opera House* (Pl. F, 3; *III*); the *Grand Opera House* (Pl. F, 3; *III*); the *American Express Building*, by Richardson, in Monroe St., just to the E. of Dearborn St. (Pl. F, 3; *III*); the *Majestic Building & Theatre*, opposite (20 stories); the *Heyworth Building*, S.W. cor. of Wabash Ave. and Madison St. (18 stories); and the *Cook County Abstract*, 100 Washington Street.

The **Public Parks** of Chicago, with a total extent of over 3000 acres, form, with their connecting boulevards, a nearly complete chain round the city, and afford over 100 M. of driveways within the city limits. A characteristic feature of the system is the

large number of small '*People's Parks*' scattered through the poorer districts and provided with baths, gymnasia, playgrounds, and so on. — On the N. side is *Lincoln Park* (see below), reached by tramways on N. Wells, N. Clark, and N. State Streets. Walkers or drivers should choose the route viâ ***Lake Shore Drive** (Pl. G, 2; *I*), one of the finest residence-streets in Chicago, containing some very handsome houses, including specimens of H. H. Richardson (not in his happiest manner) and R. M. Hunt (next door to each other). This passes near the *Water Works* (Pl. G, 2; *I*), at the foot of *Chicago Avenue*.

The water-supply of Chicago, amounting to about 450 million gallons daily, is derived from Lake Michigan by means of four systems of tunnels communicating with '*Cribs*', situated 2-4 M. from the shore. Throughout the city are ten principal pumping stations and an intricate system of land tunnels, connecting with those in the lake. In all there are now 38 M. of tunnel and 2075 M. of mains in use.

The Lake Shore Drive ends on the N. at ***Lincoln Park** (inset plan, and Pl. F G 1, *I*), which is at present 300 acres in area but is being extended by filling in the adjacent shallows of Lake Michigan.

Among the attractions of this park are the conservatories, palm-house, lily-ponds, and flower-beds; a small zoological collection; a fountain illuminated at night by electric light; the statues of ***Lincoln* (by Saint-Gaudens), *Grant* (by Rebisso), *Beethoven*, *Schiller*, *La Salle*, a *Mounted Indian*, and *Linnaeus*; and the boating lake. Near the main entrance is the *Academy of Sciences* (open free daily, 9-5), containing admirably arranged and classified collections illustrating the various natural sciences; one of the chief objects of interest is a mounted mastodon, 80 per cent of which is genuine. Park-phaetons 20c. per drive.

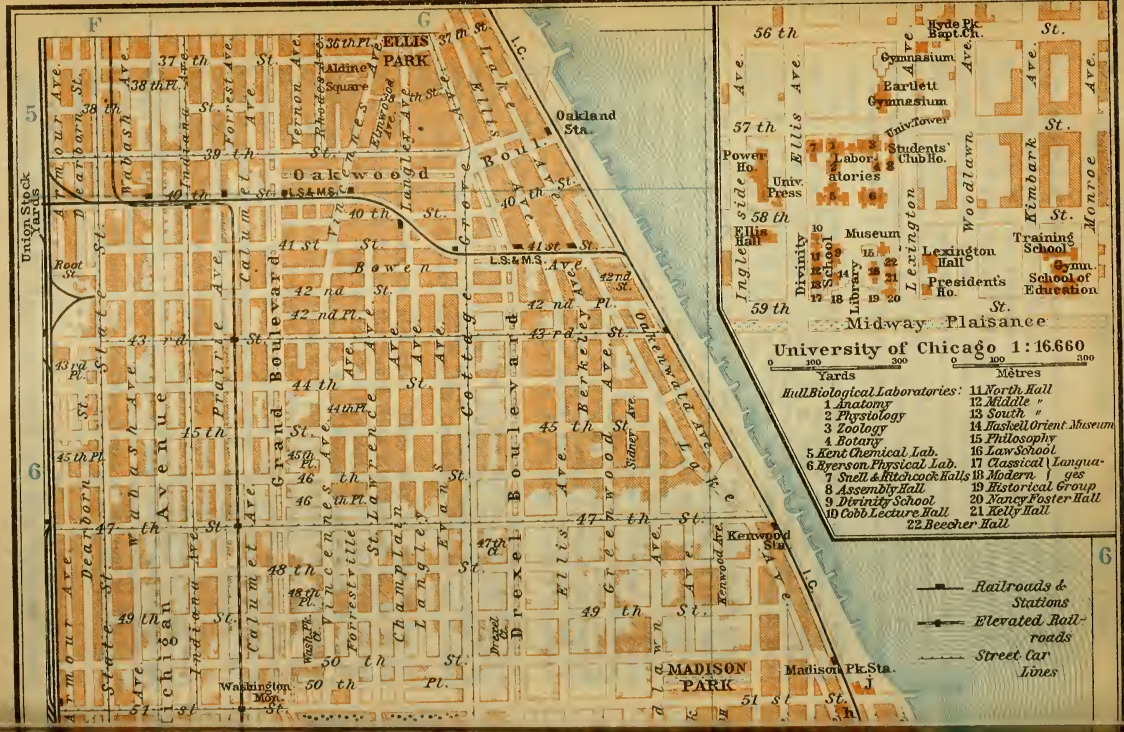
A **Beach Carriage Drive* has been constructed in the lake alongside of Lincoln Park, whence it is prolonged by the *Sheridan Boulevard* to *Fort Sheridan* (27 M.). The strip of water between this drive and the park is used as a regatta-course for small boats. The E. lagoon is crossed by a high bridge. — *Graceland* and *Rosehill Cemeteries*, also in the N. Side, deserve a visit.

The S. Side parks are also fine. They may be reached by the Illinois Central R. R., by the South Side Elevated R. R., or by the Cottage Grove Ave. trolley-line; but the best plan is to drive through ***Michigan Avenue** (Pl. G, 4; *I*) and ***Drexel Boulevards** (Pl. G, 6; *II*), two fine residence-streets, with tasteful houses and ornamental gardens. Michigan Avenue also contains several churches, the *Calumet Club* (cor. 20th St.), numerous large hotels and apartment houses, and the *First Regiment Armoury*. In Drexel Boulevard is the handsome *Drexel Memorial Fountain* by Henry Manger. We may return by ***Grand Boulevard** (Pl. G, 6; *II*).

Prairie Avenue (Pl. G, 6, 7; *II*) contains the residences of *P. D. Armour*, the late *Marshall Field* (d. 1906), the late *George M. Pullman* (d. 1897), and others of Chicago's magnates; but few of them are of architectural importance, *J. J. Glessner's* house, by Richardson, being, perhaps, among the most interesting. Adjoining the Pullman house, at the foot of 18th St., is the *Fort Dearborn Massacre Monument*, a bronze group by Carl Rohl-Smith, commemorating the massacre of 1812 (see p. 369).

***Washington Park** (371 acres; Pl. G 7, *II*) and ***Jackson Park** (523 acres; Pl. H 7, 8, *II*) are connected by a wide boulevard known

Wagner & Debes Geogr. Establ. Leipzig



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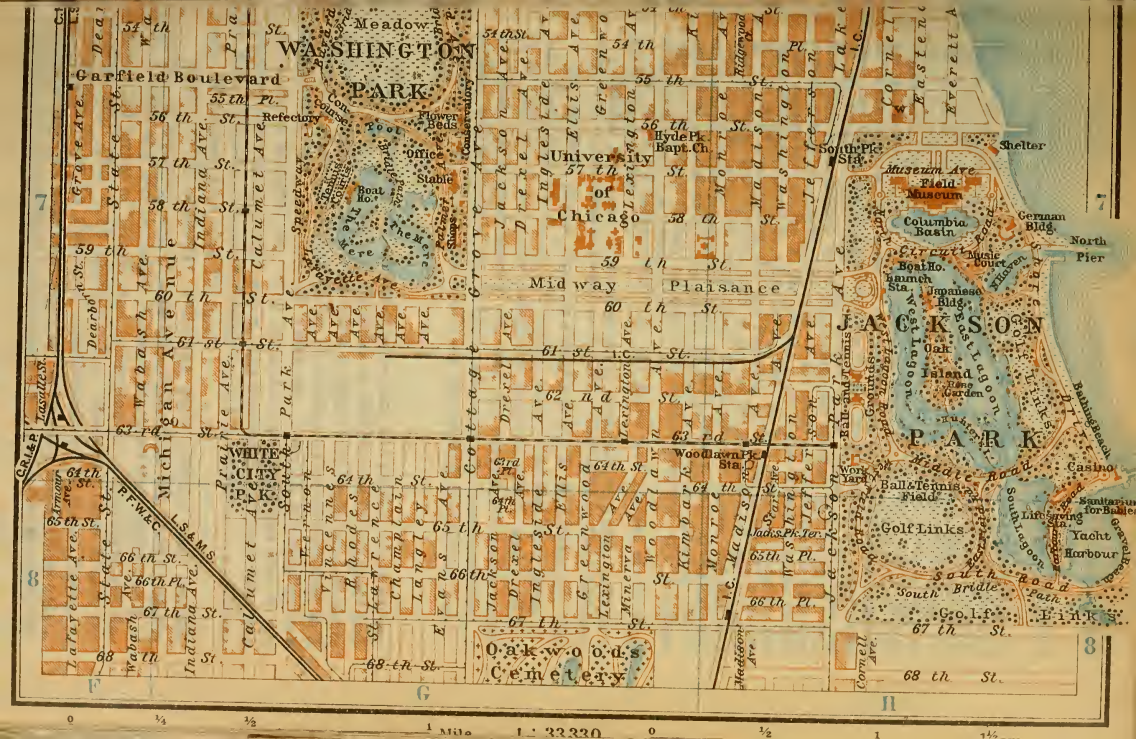
Hull Biological Laboratories:
1 Anatomy
2 Physiology
3 Zoology
4 Botany
5 Kent Chemical Lab.
6 Ryerson Physical Lab.
7 Snell & Hitchcock Halls
8 Assembly Hall
9 Divinity School
10 Cobb Lecture Hall
11 North Hall
12 Middle "
13 South "
14 Haskell Orient. Museum
15 Philosophy
16 Law School
17 Classical Languages
18 Modern "
19 Historical Group
20 Nancy Foster Hall
21 Kelly Hall
22 Beecher Hall

Railroads & Stations
Elevated Railroads
Street Car Lines



WASHINGTON PARK
Meadow
Garfield Boulevard
Refectory
Flower Beds
Office
Stable
Boat Ho.
The Mere
Conservatory
Speedway
Tennis Courts
Palmer Shops
University of Chicago
Hyde Pk. Bapt. Ch.
Midway Plaisance
South Pk. Sta.
Shelter
Museum Ave.
Field Museum
Columbia Basin
German Bldg.
North Pier
Circuit Road
Music Court
Boat Ho.
Launch Sta.
Japanese Bldg.
West Lagoon
East Lagoon
Oak Island
Rose Garden
Golf Links
Bathing Beach
JACKSON PARK
Ball and Tennis Grounds
Middle Road
Casino
Sanitarium for Babies
Life Saving Sta.
Yacht Harbour
Gravel Beach
South Lagoon
Ball & Tennis Field
Golf Links
South Road
South Bridle Path
Golf Links
Woodlawn Pk. Sta.
Jacks. Pk. Ter.
Oakwoods Cemetery
WHITE CITY PK.
Michigan Avenue
Wabash Ave.
Indiana Ave.
Calumet Ave.
Prairie Ave.
Cottage Grove Ave.
Jackson Ave.
Drexel Ave.
Inglesside Ave.
Ellis Ave.
Greenwood Ave.
Lexington Ave.
Woodlawn Ave.
Kimbark Ave.
Monroe Ave.
Madison Ave.
Washington Ave.
Jefferson Ave.
Cornell Ave.
Everett Ave.
Lasalle St.
Dearborn St.
Grove Ave.
State St.
Armour Ave.
Lafayette Ave.
Wabash Ave.
Indiana Ave.
Calumet Ave.
Prairie Ave.
South Park Ave.
Vernon Ave.
Vincennes Ave.
Rhodes Ave.
St. Lawrence Ave.
Champlain Ave.
Langley Ave.
Evans Ave.
Jackson Ave.
Drexel Ave.
Inglesside Ave.
Ellis Ave.
Greenwood Ave.
Lexington Ave.
Minerva Ave.
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54th St.
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as the *Midway Plaisance* (park-phaetons, 25 c. each pers., children 15 c.; Pl. G H 7, *II*).

Washington Park is notable for its fine trees, its flower-gardening, its water-lily ponds, and its conservatory. At the entrance is an *Equestrian Statue of Washington*, by French and Potter. — Jackson Park was the main site of the World's Columbian Exposition of 1893 (comp. p. 369), but nearly all the buildings have been removed, and the grounds have been laid out in public playing fields, drives, beaches, and groves. Piers have been constructed for the use of pleasure-boats in the lake, and bathing houses, gymnasia, and a casino have been erected. Bridges have been thrown across several arms of the picturesque lagoons (electric launches, etc.), and the Japanese Tea House on *Wooded Island* remains as a memorial of the World's Fair. The reproduction of the *Convent of La Rabida* has also been left standing as a sanitarium for mothers and children. The reproductions of a Viking ship and of the caravels of Columbus have also been preserved. At the N. end of the park is the *Field Museum of Natural History (open 9-4; adm. 25 c., free on Sat. & Sun.; Director, *Mr. F. J. V. Skiff*), occupying the Art Building of the Columbian Exposition. The museum was founded with a gift of $1,000,000 from Mr. Marshall Field (p. 376), who also bequeathed $8,000,000 for a new building and endowment. The museum contains natural history, anthropological, and geological collections of great extent, interest, and value. American Ethnology and Economic Botany are especially well represented, and the groups of large mammals are admirable.

To the S. of Jackson Park are the house and grounds of the *South Shore Country Club*.

McKinley Park, one of the small parks mentioned at p. 376, contains a natatorium and a statue of President McKinley (1843-1901) by Chas. Mulligan.

The W. Side parks: *Douglas Park* (Gen. Pl. D, 4; 180 acres), *Garfield Park* (Gen. Pl. C, 3; 186 acres), and *Humboldt Park* (Gen. Pl. D, 2; 200 acres) are little inferior to those of the N. and S. Sides. The first has a good natatorium, and the second a beautiful rose-garden, while Garfield Park has a water-court, a conservatory, a statue of Robert Burns (by W. Grant Stevenson), and a boat-house.

The **University of Chicago** (inset-plan, and Pl. G 7, *II*), between 56th and 59th Sts., opened its doors in 1892 with 600 students and is now attended by nine times that number. The total endowments amount to about $20,000,000 or (including value of buildings and equipments) $30,000,000, of which Mr. John D. Rockefeller has given about $24,000,000. The ground acquired for the site of the university has an area of 66 acres. The university includes faculties of Arts, Literature, Science, Commerce and Administration, Education, Medicine, Law, and Divinity.

About thirty different buildings have already been erected, mainly of limestone and in a Gothic style, from the designs of *Mr. H. I. Cobb* and *Mr. Coolidge*. Perhaps the most successful group is that at the corner of 57th St. and Lexington Ave., including an *Assembly Hall* (No. 8 on inset-plan), a *Students' Club House*, the *University Tower* (a shortened reproduction of Magdalen Tower at Oxford), and the *University Commons* (resembling Christ Church Hall, Oxford). Other important buildings are the *Cobb Lecture Hall* (Pl. 10),

the *Kent Chemical Laboratory* (5), the *Ryerson Physical Laboratory* (6), the *Law School* (16; inspired by King's College Chapel, Cambridge), the *Anatomy*, *Physiology*, *Zoology*, and *Botany Buildings* (Nos. 1, 2, 3, & 4), the *Walker Museum*, the *Haskell Oriental Museum* (14), the handsome *Bartlett Gymnasium*, three dormitories for women and five dormitories for men. The libraries contain 460,000 volumes and 165,000 pamphlets. On the S. edge of the Campus will stand the *Harper Memorial Library*, an enormous Gothic building by Shepley, Rutan, & Coolidge, to be erected in memory of President Wm. R. Harper (d. 1907). The *Yerkes Observatory* at *Williams Bay* on *Lake Geneva* (Wis.; 91 M. to the N.W.), containing one of the largest refracting telescopes in the world (40-inch lens, made by Alvan Clark; tube 70 ft. long), belongs to the University of Chicago. — Connected with the University is the large *School of Education*, facing the Midway Plaisance, between Monroe Ave. and Kimbark Ave.

Among the original features of the University of Chicago may be mentioned the continuousness of its work throughout the year (even in summer), with graduation ceremonies once a quarter; the assignment of the two junior classes to the care of an independent faculty; the separation of the sexes in the instruction of the junior classes and their coöperation in the senior classes; and the 'house' system, under which groups of students become practically self-governing under general supervision.

Among the other notable buildings in this district is the *Blackstone Branch Library*, in a classical style.

The ***Newberry Library** (Pl. F, 2; *1*), endowed by Walter Loomis Newberry (d. 1868) with $2,500,000 (500,000*l.*), occupies a handsome granite structure in Walton Place, on the N. side of the city. It is a free reference library, with noteworthy collections in history, philology, and music (ca. 200,000 vols. in all). — The ***John Crerar Library**, established by a bequest of $3,400,000 (680,000*l.*) by John Crerar (d. 1889), is a free reference library of scientific and technical literature (215,000 vols.). At present it occupies temporary quarters on the 6th floor of the Marshall Field Building (p. 375); but a permanent building is to be erected in Grant Park (p. 371).

The **Chicago Historical Society** (open free, daily, 9-5; Pl. F 2, *1*), one of the oldest institutions in the city (1856), possesses numerous paintings, MSS., and historical relics relating to Chicago and the North-West; also a library of 50,000 books and 100,000 pamphlets. It suffered irreparable losses in the great fire (p. 369), but now occupies a fire-proof edifice at the corner of Dearborn Ave. and Ontario St., in which even the furniture is of metal.

The Churches of Chicago are comparatively uninteresting. Among the most important are the R. C. *Cathedral of the Holy Name*, at the cor. of Superior and N. State Sts. (N. Side); the *Third Presbyterian Church*, cor. of Ashland and Ogden Aves. (Gen. Pl. E, 3), with good stained glass; the *Church of the Epiphany*, at the cor. of Ashland Ave. and Adams St., not far from the

last; the *Second Presbyterian Church*, Michigan Ave., cor. 20th St. (Pl. F, G, 4; *I*); the *First Church of Christ, Scientist*, Drexel Boul., near 40th St. (Pl. G, 5, 6; *II*); the *Fifth Church of Christ, Scientist*, Madison Ave., cor. of 49th St. (Pl. H, 6; *II*); *Plymouth Church*, Michigan Ave., near 25th St. (Gen. Pl. F, 4); *Hyde Park Baptist Church*, cor. 56th St. and Woodlawn Ave. (Pl. G, 7; *II*); and *Trinity Church*, at the S.E. cor. of 26th St. and Michigan Ave. (Pl. G, 4; *I*).

The interesting 'Medical District', in the W. Side, has for its nucleus the large *County Hospital*, near which are the *Rush Medical College* (affiliated with the University of Chicago; 300 students), the *College of Physicians and Surgeons*, the *Presbyterian Hospital*, the *Illinois Training School for Nurses*, and the *Chicago Homeopathic Medical College*.

*Hull House (Pl. F, 3; *I*), at the S.W. cor. of Polk and S. Halsted Sts. is a social settlement of men and women (*Miss Jane Addams*, Head Resident), resembling Toynbee Hall (see *Baedeker's London*) in its purpose of furnishing a social, intellectual, and charitable centre for the surrounding district. It includes a tree kindergarten, a crèche, a coffee-house, a residential boys' club, a theatre, a labor-museum, and a free gymnasium, while classes, lectures, and concerts of various kinds are held. Visitors welcomed on Sat. & Sunday. — The *Lewis Institute*, founded and endowed by the late Mr. A. A. Lewis and opened in 1896, comprises a School of Arts and a School of Engineering, tuition in which is furnished at a nominal cost. — The **Armour Mission**, at the corner of Armour Ave. and 33rd St. (Pl. F, 5; *I*), includes a mission hall, a crèche, a library, a kindergarten, a free dispensary, etc. The *Armour Institute* (president, Rev. Dr. F. W. Gunsaulus), a well equipped institution for higher technical education, has been endowed by its founders with $3,000,000.

In Union Park (Pl. E, 3; *I*) is the *Police Monument*, erected to commemorate the policemen killed by the Anarchists with bombs on May 4th, 1886. The Anarchists executed for complicity in the bomb-throwing are also commemorated in a monument at *Waldheim Cemetery*, 10 M. to the W. of the City Hall (beyond Gen. Pl. A, 3; Chicago Terminal Transfer R. R.).

Few travellers will leave Chicago without a visit to the famous **Union Stockyards** (Pl. E F, 5, 6; *I*). The yards ('Packingtown') are in S. Halsted St., 5½ M. to the S.W. of the City Hall, and may be reached by the S. Halsted St. or Centre Ave. trolley-lines, both running directly to the main entrance at 41st St. Visitors are freely admitted to the yards and will be shown round by a guide; but it is advisable to be provided with an introduction to one of the great packing-houses. Tues. & Thurs. are the best days.

The yards proper cover an area of about 500 acres, have 25 M. of feeding-troughs, and 20 M. of water-troughs, and can accommodate 75,000 cattle, 300,000 hogs, 50,000 sheep, and 5000 horses. The annual receipts of cattle are between 3 and 4 million head, besides 7-8 million hogs, 4-5 million sheep, and 100,000 horses, with a total value of over 325 million dollars. From two-thirds to three-fourths of the cattle and hogs are killed in the yards, and sent out in the form of meat. About 30,000 workers are employed by the packing-houses, and the annual value of their products, including canned meats, fertilizers, glue, butterine, etc., is about 320 million dollars. The processes of killing the cattle and hogs are extremely ingenious and expeditious, and will interest those whose nerves are strong enough to contemplate with equanimity wholesale slaughter and oceans of blood. — The Stockyards contain a fair hotel (*Transit House*, $2, R. from 75 c.) and have a bank and newspaper of their own. The *Transit Co.* uses 30 locomotives in handling the livestock between the yards and the different railway-lines and has 245 M. of track. In 1907 a huge International Stock Show was held at the Stockyards, when 4000 animals from Europe and America were on view.

An interesting visit may be made to one of the large Grain Elevators, of which there are about 40, with an aggregate capacity of nearly 30 million bushels. They are all situated on the river.

A visit to **Pullman** (*Florence Hotel*, D. $ 1), 14 M. to the S. of the County Building, on the Illinois Central R. R. (¾ hr.), may be included by all who can spare half-a-day. Pullman was built by the *Pullman Palace Car Co.*, and is a model little town, artistically planned, scientifically constructed, and consisting mainly of neat workmen's houses. To the left of the tasteful station are the **Pullman Car Works*, the various processes of which are full of interest. About 150 Pullman cars, 500 ordinary passenger-cars, and 12,000 freight-cars are manufactured annually, with a total value of 10-12 million dollars. The Pullman Car Co. now owns and operates 2400 cars. Among the chief features of the town is the *Arcade*, a building which includes shops, a tasteful theatre, and a library (8000 vols.). The population of the town is about 12,000, most of whom are connected with the Pullman Car Works. The town now forms part of the 34th ward of Chicago.

Other favourite points for short excursions from Chicago, by steamer, railway, or electric cars, are *Evanston* (see below), *Michigan City*, *St. Joseph*, *Kenosha*, *Grand Haven*, *Kewaunee*, *Sturgeon Bay*, *South Haven*, *Ottawa Beach*, *Lake Forest* (see below), *Highland Park* (see below), *Winnetka*, etc. The part of Indiana adjoining Chicago on the S.E., reached *(e.g.)* viâ (19 M.) *Indiana Harbor* (p. 357), is said to be an excellent district for cycling and motoring. — The *Chicago Golf Club* has its grounds at (25 M.) *Wheaton*, on the Chic. & N.W. Railway.

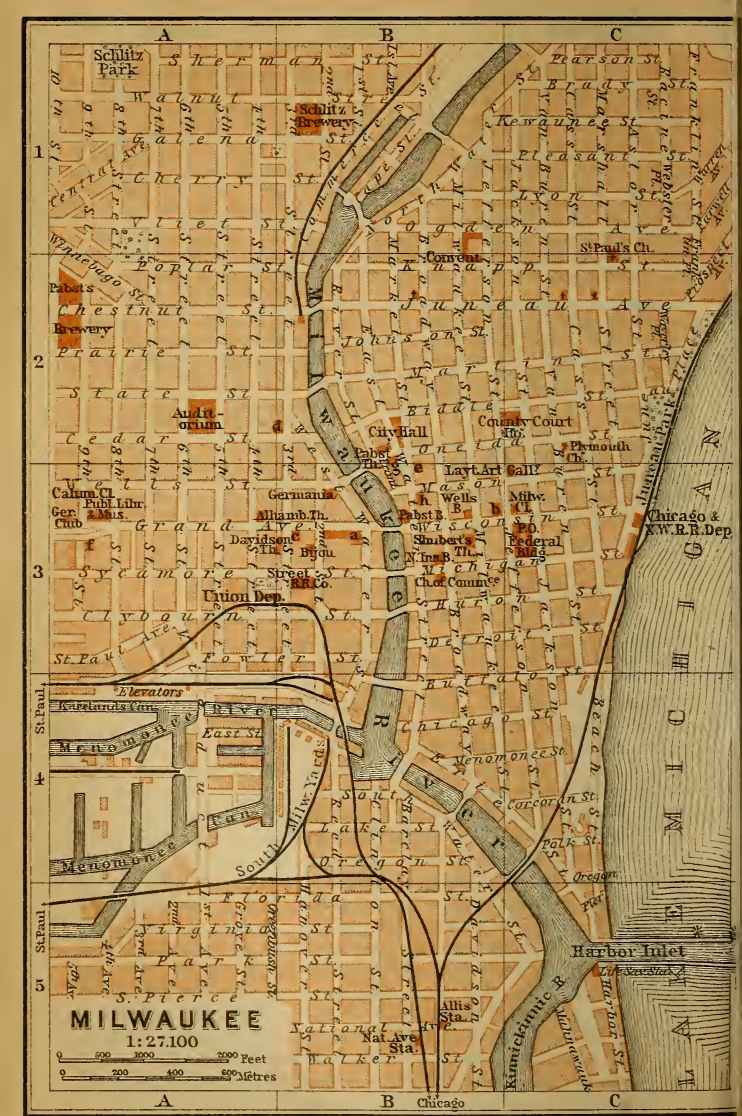
From Chicago to *Baltimore* and *Washington*, see R. 49; to *Buffalo*, see R. 50; to *Cincinnati*, see R. 59; to *Council Bluffs* and *Omaha*, see R. 65; to *Kansas City*, see R. 67; to *Milwaukee*, see R. 52; to *New Orleans*, see R. 93; to *New York*, see R. 29; to *Pittsburg*, see R. 48; to *St. Louis*, see R. 58; to *St. Paul* and *Minneapolis*, see R. 53.

52. From Chicago to Milwaukee.

a. Viâ Chicago & North-Western Railway.

85 M. Railway in 2-3 hrs. (fare $ 2.55; chair-car 35 c.). — An *Electric Railway* runs, more or less parallel with this line, all the way to *Racine* (fare 95 c.; return $ 1.30).

Chicago (Wells St. Station), see p. 366. The line runs to the N. along *Lake Michigan*, passing many small stations forming suburban homes for Chicago merchants. The lake does not come into sight till beyond Waukegan. — As we leave Chicago we see the *Deering Works* (p. 370) to the left. — 12 M. *Evanston* (Avenue House, $ 2½-3½), with most of the buildings of the *North-Western University*, a Methodist institution with 4000 students. Its schools of medicine, law, and pharmacy are in Chicago. — 23 M. *Highland Park* (Moraine Hotel, $ 3-6), a favourite resort of Chicago business-men; 25 M. *Fort Sheridan*, a U. S. military post with a regiment of infantry, two troops of cavalry, and two batteries of artillery. 28 M. *Lake Forest*, another place with the pleasant rural homes of Chicagoans, is the seat of Lake Forest College (200 students) and the Onwentsia Golf Club. 36 M. *Waukegan*, with 2 M. of 'Sheridan Drive' (comp. pp. 376, 383). — 42 M. *Zion City* is the seat of the singular religious community founded by John A. Dowie (d. 1907), which is now more or less disintegrated. — A little farther on we enter *Wiscónsin* (the 'Badger State'), a fertile agricultural and lumbering state, with numerous interesting Indian mounds and large deposits



Wagner & Debes' Geogr. Estab. Leipzig.

of iron. More prehistoric copper implements have been found here than in any other state. A very large number of the inhabitants are of German or Scandinavian stock.

51 M. *Kenosha*, with (1905) 16,235 inhab. and the large Pennoyer Sanitarium ($ 3-5; seen to the right), is also connected with Milwaukee by an electric railway. — 62 M. *Racine* (Hot. Racine, $ 2½-3; Merchants, $ 2), with (1905) 32,290 inhab., has a good lake-harbour and carries on considerable trade and manufactures (waggons, buggies, farm implements, etc.).

85 M. *Milwaukee*, see below.

b. Viâ Chicago, Milwaukee, & St. Paul Railway.

85 M. Railway in 2-3 hrs. (fares as at p. 380).

Chicago (Canal St. Union Depot), see p. 366. This line runs nearly parallel with that just described, but a little more inland. 9 M. *Mayfair;* 15 M. *Golf*, the seat of the Glen View Golf Club; 32 M. *Rondout;* 43 M. *Wadsworth;* 52 M. *Ranney;* 62 M. *Corliss*, for a branch to (7 M.) *Racine* (see above). — 85 M. *Milwaukee.*

Milwaukee. — Railway Stations. 1. *Chicago & N. W. Railway* (Pl. C, 3), at the foot of Wisconsin St. — 2. *Union Depot* (Pl. A, B, 3), at the junction of Third and Sycamore Sts., for the Wis. Central and C. M. & St. P. railways. — 3. *South Side* or *Allis Station* (Pl. B, 5), cor. Barclay St. and National Ave., a subsidiary station of the C. M. & St. P. and the Chicago & N.W. railways.

Hotels. Pfister (Pl. b; B, 3), Wisconsin St., cor. of Jefferson St., $ 1½-3½; Plankinton House (Pl. a; B, 3), Grand Ave., cor. of W. Water St., $ 2½-5, R. from $ 1½; Republican House (Pl. d; A, B, 2), cor. Cedar and 3rd Sts., from $ 2½, R. from $ 1; Schlitz Hotel (Pl. c; B, 3), Grand Ave., cor. 3rd St., with palm-garden, R. from $ 1; St. Charles (Pl. e; B, 2, 3), E. Water St., $ 2-3½; Aberdeen (Pl. f; A, 3), Grand Ave., $ 2-3; Kirby (Pl. h; B, 3), Mason St., cor. E. Water St., R. from 50 c.; Blatz (Pl. g; B, 2, 3), opposite the City Hall, R. from $ 1.

Restaurants. At the *Hotels; Blatz Hotel Restaurant*, D. 50 c.; *The Gargoyle*, 302 Grand Ave.; *Pabst Theater-Café*, German; *Y. M. C. A. Coffee House*, 143 Fourth St.; *Women's Exchange*, 415 Milwaukee St.; *Railway Restaurants* at the two main stations (see above). In the suburbs are numerous pleasant *Beer Gardens*, in the German style.

Electric Tramways (fare 5 c.) traverse the principal streets and run to the suburbs.

Cabs and Hacks. For 1-2 pers. for 1 M. or between the railroad depots $ 1, for 2 M. $ 1½, above 2 M. $ 2, each addit. pers. 50 c. For the first hour $ 1, each addit. hr. 50 c.; with two horses $ 2 and $ 1. Baggage up to 100lbs. free; excess 15 c. per package.

Steamers ply regularly to Chicago (comp. p. 368) and to all the chief places on the Great Lakes, and to various summer-resorts near Milwaukee.

Theatres. *Alhambra* (Pl. A, 3), cor. Grand Ave. and 4th St.; *Majestic*, Grand Ave., adjoining the Schlitz Hotel (see above; polite vaudeville); *Davidson's* (Pl. A, B, 3), 3rd St., near Grand Ave.; *Bijou* (Pl. B, 3), 2nd St.; *Shubert's* (Pl. B, 3), Milwaukee St.

Post Office (Pl. C, 3), Wisconsin St. (comp. p. 382).

Milwaukee (580 ft. above the sea), the largest city in Wisconsin and one of the chief manufacturing and commercial centres of the N.W., occupies a pleasant undulating site on the W. shore of Lake

Michigan, at the mouth of the river *Milwaukee*. An excellent harbour has been formed by the erection of huge breakwaters, and the river admits the largest lake-vessels to the doors of the warehouses. The Milwaukee receives two tributaries, the *Menomonee* and *Kinnickinnic*, within the city. The city is well built, largely of a light-coloured brick, and many of its streets are lined with beautiful shade-trees, recalling some of the older E. cities. Among the finest residence-streets are Grand Avenue (W. S.), Prospect Avenue, Waverley Place, Juneau Avenue, Marshall Street, and Astor Street (E. S.). About two-thirds of the (1905) 312,950 inhab. are Germans, which may account for its successful cultivation of music and art. There are no fewer than 75 musical societies in the city.

Milwaukee became a village in 1835 and received a city-charter in 1846. Its growth has been rapid, particularly in the last 25 years.

The chief articles of its extensive commerce are grain, flour, coal, lumber, hides, and the products of its great manufacturing industries. The leading industry is the making of iron, steel, and heavy machinery. The flour-mills are very large (daily output ca. 9000 barrels), and the grain-elevators have a capacity of 5½ million bushels. Milwaukee lager beer (Pabst, Schlitz, Blatz, etc.) is known all over the United States, and is produced annually to the amount of over 3½ million barrels (value $ 25,000,000). Pork-packing is extensively carried on, and the other staple manufactures include leather and tobacco (total value in 1905, $ 138,881,545).

Grand Avenue (Pl. A, B, 3), which runs E. and W., contains many of the chief buildings and best shops, while *Wisconsin Street* (Pl. B, C, 3) and *East Water Street* (Pl. B, 2-4) are also busy thoroughfares. Among the most prominent buildings are the **Federal Building** (Pl. C, 3), a handsome structure of grey granite in a turreted baronial style, occupying the block bounded by Jefferson, Jackson, Michigan, and Wisconsin Sts., and accommodating the *Post Office*, *Custom House*, and *U. S. Court House* (interior finely finished in marble, mosaics, mahogany, and oak); the *County Court House* (Pl. C, 2; view from dome), a brown sandstone edifice, in the square bounded by Jefferson, Jackson, Oneida, and Biddle Sts.; the tall *Wells Building* (Pl. B, 3), at the corner of Milwaukee and Wisconsin Sts.; the *Chamber of Commerce* (Pl. B, 3), Michigan St.; *Plymouth Church* (Pl. C, 2), a massive but unecclesiastical building at the corner of Van Buren and Oneida Sts.; and *St. Paul's Church* (Epis.; Pl. C, 1, 2), Marshall St. The *Auditorium* (Pl. A, 2), in Cedar St., can accommodate 10,000 people. — The **Layton Art Gallery** (Pl. B, C, 3), a well-lighted structure at the corner of Jefferson and Mason Sts., has some interesting pictures and statues (open daily, except Mon., 10-4, Sun. 2-4; adm. on Wed. & Frid. 25 c.; catalogue 10 c.). The paintings include examples of Rosa Bonheur, Constable, Corot, Millet, Achenbach, Alma-Tadema, Clays, Inness, Kensett, Mauve, Holmberg, Pradilla, Mesdag, Munkácsy, Van Marcke, and other modern masters. In the Sculpture Hall are works by Hiram Powers and Romanelli. — The magnificent **Public Library** (Pl. A, 3), in Grand Ave., between 8th and 9th Sts., contains 200,000 vols. and

a free museum of natural history, palæontology, etc. — The curiously thin-looking **City Hall** (Pl. B, 2), with one of the largest bells in the world and an illuminated clock-dial (visible for 2 M. at night), occupies a triangular site bounded by E. Water, Market, and Biddle Streets.

Other notable structures in the business district are the *Germania Building* (Pl. B, 3), at the convergence of W. Water, Wells, and 2nd Sts., said to be the best equipped building of any German newspaper in America; the *Evening Wisconsin Building*, cor. Milwaukee and Michigan Streets; the *Sentinel*, 89 Mason St.; the *New Insurance Building* (Pl. B, 3), cor. Broadway and Michigan St.; the *Mitchell Building*, cor. Michigan and E. Water Sts.; and the *Pabst Building* (Pl. B, 3), cor. Wisconsin and E. Water Sts.

Among the public monuments are statues of *Washington* (Grand Ave., near 9th St.; Pl. A, 3) and *Bergh*, the philanthropist (in front of the City Hall), and the *Soldiers Monument*, at the cor. of 10th St. and Grand Ave.

**Juneau Park* (Pl. C, 2, 3), laid out on a bluff overlooking Lake Michigan, contains statues of *Solomon Juneau* (1793-1856), the earliest white settler, and *Leif Ericson* (p. 268); it commands fine views. *Lake Park*, farther to the N., also overlooks the lake. Near it is the *North Point Pumping Station*, with a tall and graceful water tower. A pleasant drive may be taken to the N. along the river to (6 M.) *Whitefish Bay* (with concert-pavilion, pier, Ferris wheel, and other attractions; fare by trolley 10 c.) and (8 M.) *Fox Point*. The **Forest Home Cemetery*, at the S.W. corner of the city, deserves a visit. The attractions of *Washington Park*, on the W. limits of the city, include a large herd of deer.

Visitors to Milwaukee should not fail to inspect one of the great *Breweries*, such as *Pabst's* (Chestnut St.; Pl. A, 2), which covers 34 acres and produces 1,000,000 barrels of beer annually, or *Schlitz's* (Pl. B, 1); while the *Grain Elevators*, the *Flour Mills*, the *Coal Docks* (with capacity for handling 4-5,000,000 tons annually), the *International Harvester Co.* (comp. p. 370), and the workshops of the *C. M. & St. P. Railway* will also repay a visit. — To the S. *(Bay View)* are the *Rolling Mills* of the *Illinois Steel Co.*, covering 154 acres of ground. — To the S.W., chiefly in the valley of the Menomonee, are the large *Brick Yards* that produce the light-coloured bricks which give Milwaukee the name of 'Cream City'. — To the N., along the Milwaukee river, are extensive *Cement Works*.

Sheridan Drive, skirting the lake to the S. for 2 M., is intended to be prolonged so as ultimately to meet the boulevard of that name running from Chicago to Fort Sheridan (see p. 376). — About 3 M. to the W. of the centre of the city is the *National Soldiers' Home*, with accommodation for 2400 disabled soldiers and a fine park of 400 acres. At *Wauwatosa*, 2½ M. to the W., are the large *County Hospital* and the *State Fair Grounds* (electric car lines, connecting with city lines; fare 5 c.). — One of the favourite resorts of Milwaukeans is Waukesha (*Fountain Inn*, $ 3-5), a village 20 M. to the W., with well-known springs (Bethesda, White Rock, etc.), the water of which (efficacious in diabetes and Bright's disease) is widely exported.

Milwaukee is an important railway-centre, lines radiating hence to all points in Wisconsin. Those running to the N. and N.W. reach *Marquette*, *Ashland*, *Duluth*, and other points on Lake Superior (comp. pp. 393-396). From Milwaukee to *St. Paul*, see next page.

53. From Chicago to St. Paul and Minneapolis.

a. Viâ Chicago, Milwaukee, & St. Paul Railway.

420 M. Railway to (410 M.) *St. Paul* in 12½-13 hrs. and thence to (10 M.) *Minneapolis* in ½-¾ hr. more (fare $8; parlor-car $1, sleeper $2). The fast mail line of this service is the route viâ La Crosse, described below; but some trains run viâ *Madison* and *Prairie du Chien* or viâ *Dubuque*.

From Chicago (Canal St. Station) to (85 M.) *Milwaukee*, see R. 52b. The line now turns to the W. 99 M. *Brookfield* is the junction of the line viâ *Madison* (p. 385) and *Prairie du Chien* (see p. 386 and above), which diverges to the left. — 118 M. *Oconomowoc* (Draper Hall, $3-5; Woodlands, $2½-3½), a favourite summer-resort. — 130 M. *Watertown* (Commercial, $2), an industrial city on *Rock River* (good water-power) and the seat of the N.W. University (Lutheran; 260 students) and the Sacred Heart University.

Beyond Watertown our line runs to the N.W. 150 M. *Columbus;* 178 M. *Portage City* (Rail. Restaurant), a trading city with (1905) 5525 inhab., at the head of the navigation of the *Wisconsin*. 195 M. *Kilbourn City* (Finch Ho., $2-2½) is the starting-point for a visit to the fantastic **Dalles of the Wisconsin* (comp. p. 469). 240 M. *Tomah;* 257 M. *Sparta*. — 283 M. **La Crosse** (650 ft.; *Stoddard*, from $2½; *Rail. Restaurant*), a flourishing city of (1905) 29,080 inhab. on the E. bank of the Mississippi, with large saw-mills.

We now cross the Mississippi, here ⅓ M. wide, enter *Minnesota* (the 'North Star State'), and ascend on the W. bank of the river, through picturesque scenery (views to the right). — 307 M. *Winona* (The Winona, $2-3), with (1905) 20,334 inhab., is one of the most important grain-shipping points in the country.

From Winona to Rochester, 50 M., *North-Western Railway* in 2 hrs. — Rochester (*Kahler*, $2½-5; *Cook*, $2-3), a country-town with (1905) 7233 inhab., is famous as the seat of *St. Mary's Surgical Hospital*, conducted by *Dr. C. H.* and *Dr. W. J. Mayo*, which is annually visited by 15,000 patients from all parts of the world, most of them to undergo major operations. Many thousands of surgeons have also visited the hospital, which is universally recognized as one of the foremost rank in every way.

340 M. *Wabasha* (Hurd Ho., $2) lies near the foot of the beautiful expansion of the Mississippi known as **Lake Pepin* (30 M. long and 3-5 M. wide). 352½ M. *Lake City* (Lyon, $2) and (359 M.) *Frontenac* (Frontenac Inn, $2) are two favourite resorts in this beautiful district (comp. p. 428). 370 M. *Red Wing;* 390 M. *Hastings*.

410 M. **St. Paul**, see p. 388. — 420 M. **Minneapolis**, see p. 390.

b. Viâ Chicago & North-Western Railway.

421 M. Railway to (409 M.) *St. Paul* in 12½-14 hrs.; to (421 M.) *Minneapolis* in ¾ hr. more (fares as above).

Chicago (Wells St. Station), see p. 366. The train runs to the N.W., passing various suburban stations. 63 M. *Harvard Junction*. Beyond this point some trains run viâ (91 M.) *Beloit* (important

college, with 380 students), just inside the *Wisconsin* boundary, and others, entering Wisconsin near (71 M.) *Sharon*, run viâ (91 M.) *Janesville* (cotton and woollen mills; trade in locally grown tobacco), re-uniting at (116 M.) *Evansville*.

138½ M. **Madison** (845 ft.; *Park Hotel*, $3-4; *Avenue*, $2-3; *Capitol*, *Sherlock*, $2-2½), the capital of Wisconsin, a pleasant city of (1905) 24,300 inhab., situated between the beautiful **Lakes Mendota*, *Monona*, and *Wingra*. The *State Capitol* was partly destroyed by fire in 1904, but has been rebuilt by G. P. Post in the form of a Greek cross, crowned by a well-proportioned dome. Housed in the Capitol are the *State Law Library* (40,000 vols.) and the offices of the *Wisconsin Free Library Commission*. The *University of Wisconsin*, finely situated on two hills overlooking Lake Mendota, is attended by 4000 students. Its observatory (the *Washburn Observatory*) is one of the best in America; its departments of history, economics, geology, agriculture, and engineering are particularly well-equipped and have national reputations. Opposite the campus is the building of the **Wisconsin State Historical Society*, the most important institution of the kind beyond the Alleghenies, which possesses a reference library of 155,000 vols. and 151,000 pamphlets (its collection of MSS. relating to the West being exceptionally important) and a historical and ethnological museum. In the same building are the libraries of the University (125,000 vols.) and the *Wisconsin Academy of Sciences, Arts, and Letters* (6000 vols.). Madison has several pretty public parks and a system of attractive pleasure-drives 35 M. long.

Beyond Madison we pass to the N. of the pretty *Lake Mendota* (see above). 171 M. *Devil's Lake*, seen to the left; 176 M. *Baraboo*, in an iron-mining district. At (213 M.) *Elroy* we diverge to the right from the line to *La Crosse* (p. 384) and traverse a district of pine-forests. Near (226 M.) *Camp Douglas* we see several isolated rocks of fantastic (doubtless water-worn) formation. 299 M. *Augusta*. 321½ M. *Eau Claire*, with (1905) 18,740 inhab., the junction of the branch to Duluth (p. 393), is an important lumbering point at the head of navigation on the *Chippewa River*. 345 M. *Menomonie*. — 389 M. *Hudson* (Sanatorium, $15-35 per week), pleasantly situated on the E. bank of *Lake St. Croix*. An excursion may be made to the **Dalles of the St. Croix*. We now cross the *St. Croix* and enter *Minnesota* (p. 384).

409 M. **St. Paul**, see p. 388. — 421 M. **Minneapolis**, see p. 390.

c. Viâ Illinois Central Railroad *(Albert Lea Route)*.

501 M. Illinois Central R. R. to (382 M.) *Albert Lea*; Minneapolis & St. Louis R. R. thence to (490 M.) *Minneapolis* and (501 M.) *St. Paul* (15-16 hrs.; fares as at p. 384).

Chicago (Illinois Central Station), see p. 366. The train runs to the W. through a rich agricultural district in the N. part of Illi-

nois. The first station of importance is (87 M.) *Rockford* (The Nelson, $2\frac{1}{2}$-$3\frac{1}{2}$), a busy industrial city with 31,000 inhab., on the Rock River. 114 M. *Freeport* (Brewster Ho., $2), on the *Pecatonica*, with 13,260 inhab., manufactures buggies, hardware, machinery, boots, and musical instruments. 166 M. *Galena* (De Soto, Grant, $2), with 5000 inhab., was once the home of General Grant and is important for its river-trade in lead and zinc. The train descends the valley of the *Galena* and crosses the *Mississippi* by a long bridge.

184 M. **Dubuque** (600 ft.; *Julien Ho.*, $2\frac{1}{2}$-4; *Merchants*, $2), the chief industrial city of *Iowa* (p. 420), with (1905) 41,941 inhab., large railway-workshops, and the handsome *Carnegie-Stout Free Library*. It is the centre of the lead and zinc industries of the N.W.

Various rivers are crossed farther on. 213 M. *Dyersville;* 276 M. *Waterloo*, on *Red Cedar River*, with (1905) 18,071 inhab. and various industries. We follow the valley of the Cedar River. At (323 M.) *Charles City* we cross the C. M. & St. P. Railway. Beyond (355 M.) *Mona* we enter *Minnesota* (p. 384). — 382 M. *Albert Lea* (1230 ft.; Albert, from $2) is a thriving little city with (1905) 5657 inhabitants. — 424 M. *Waterville;* 463 M. *Merriam;* 482 M. *Hopkins*.

490 M. **Minneapolis**, see p. 390. — 501 M. **St. Paul**, see p. 388.

d. Viâ Chicago, Burlington, & Quincy Railroad.

442 M. Railway in 13-$14\frac{1}{2}$ hrs. (fares as at p. 384; free reclining chair cars).

Chicago (Canal St. Station), see p. 366. 37 M. *Aurora* (650 ft.; Bishop Ho., $2\frac{1}{2}$-4), an industrial city with 24,147 inhab., claims to have been the first to light its streets by electricity (1881) and has the large workshops of the C. B. & Q. R. R. We diverge to the right (comp. p. 421) from the line to Kansas City (p. 423), Omaha (p. 418), and Denver (p. 471). 99 M. *Oregon*. We now follow the tracks of the Chicago, Burlington, and Northern Railroad. From (145 M.) *Savanna* (Rail. Restaurant) the line runs to the N. along the E. bank of the *Mississippi*, affording numerous fine views to the left. 171 M. *Galena Junction*, for (4 M.) *Galena* (see above). At (185 M.) *East Dubuque*, on the E. bank of the river, opposite Dubuque (also reached by trains of this line), we enter *Wisconsin* (p. 380). — 239 M. **Prairie du Chien** (620 ft.; *Dousman Ho.*, $2-3; *Commercial*, $2), with (1905) 3180 inhab., was a French military post in the latter part of the 17th cent. and lies just above the mouth of the *Wisconsin River*. 298 M. *La Crosse* (Rail. Restaurant), see p. 384; 326 M. *East Winona*, opposite Winona (p. 384). Numerous small stations.

431 M. **St. Paul**, see p. 388. — 442 M. **Minneapolis**, see p. 390.

e. Viâ Wisconsin Central Railway.

475 M. Railway in $14\frac{1}{2}$-$15\frac{1}{2}$ hrs. (fares as at p. 384; free reclining chair cars). This route leads through the most productive white pine (*Pinus Strobus*) district in the world.

Chicago (Illinois Central Station), see p. 366. This line runs towards the N. 48 M. *Gray's Lake* (Hotel, $ 1½); 54 M. *Lake Villa* (Hotel, $ 2½), the station for (4 M.; omn. 25 c.) the popular *Fox Lake* (Mineola Hotel, $ 2½). We enter *Wisconsin* (p. 380) beyond (58 M.) *Antioch.* 100 M. *Waukesha* (p. 383). At (120 M.) *Rugby Junction* we join the Wisconsin Central line from Milwaukee (p. 381). — 159 M. *Fond du Lac* (Palmer, $ 2-3; Erving, $ 2-2½), a manufacturing city of (1905) 17,285 inhab., with a trade in lumber, lies at the S. end of *Lake Winnebago* (30 M. long and 10 M. wide), the W. shore of which we now follow. 176 M. *Oshkosh* (Athearn, $ 2-3½; Tremont Ho., $ 2-2½), a city of (1905) 30,575 inhab., with sawmills and factories, is the seat of the State Normal School and the State Insane Asylum. At (189 M.) *Neenah* we turn to the left (W.) and leave the lake. 224 M. *Waupaca* (Grand View, $ 3), the station for (4 M.) the attractive *Chaino Lakes.* 252 M. *Stevens Point*, on the *Wisconsin;* 306 M. *Abbotsford*, the junction of a line running to the N. to (132 M.) Ashland (p. 395); 360 M. *Chippewa Falls*, with (1905) 9010 inhab. and a trade in lumber; 426 M. *New Richmond.*

465 M. **St. Paul**, see p. 388. — 475 M. **Minneapolis**, see p. 390.

f. Viâ Chicago Great Western Railway.

430 M. Railway in 12½-15 hrs. (fares as at p. 384).

Chicago (Harrison St. Station), see p. 366. The train runs at first a little to the N. of W. 52 M. *Sycamore;* 126 M. *Stockton.* We reach the *Mississippi* at (167 M.) **Dubuque** (p. 386). 197 M. *Dyersville* (p. 386). At (240 M.) *Oelwein* (1040 ft.) we diverge to the right (N.) from the main line to *Kansas City* (p. 423). From (348 M.) *Dodge Centre* a branch-line runs to *Mason City*, the seat of Memorial University.

420 M. **St. Paul**, see p. 388. — 430 M. **Minneapolis**, see p. 390.

g. Viâ Chicago, Rock Island, and Pacific Railway.

524 M. Railway to (514 M.) *St. Paul* in 15¾-16¼ hrs.; to (524 M.) *Minneapolis* in ¾ hr. more (fares as at p. 384).

From Chicago to (222 M.) *West Liberty*, see R. 65c. Our line now diverges to the right (N.) from the main line to Omaha and traverses the great wheat-fields of N. Iowa. — 259 M. *Cedar Rapids* (p. 419); 316 M. *Cedar Falls.* — Beyond (396 M.) *Northwood* we enter *Minnesota* (p. 384). 434 M. *Albert Lea* (p. 386); 460 M. *Faribault*, with an Anglican cathedral. — Our line now runs almost parallel with the Illinois Central R. R. (see R. 53c).

514 M. **St. Paul**, see p. 388. — 524 M. **Minneapolis**, see p. 390.

54. St. Paul and Minneapolis.

St. Paul and *Minneapolis*, the 'Twin Cities' of the West, practically form one large city with ca. 500,000 inhab., though their centres are 10 M. apart.

St. Paul. — *Union Depot* (Pl. E, 2, 3; restaurant), on the river, at the foot of Sibley St., used by all the railways.

Hotels. Ryan (Pl. a; D, 2), cor. of Robert and 6th Sts., R. from $1½, with café-restaurant; Frederick (Pl. f; C, 3), cor. of 5th and Cedar Sts., R. from $1½, well spoken of; *Aberdeen, cor. of Dayton Ave. and Virginia Ave. (beyond Pl. A, 2), from $3½, R. with bath from $2, recommended for a prolonged stay; Angus, cor. of Selby and Western Sts., another house of the same class, $2½-3½; Merchants (Pl. c; E, 3), cor. E. 3rd & Jackson Sts., commercial, $2-3, R. from $1; Euclid (Pl. b; C, 3), Washington St., near 6th St., R. from $1; Magee's Bachelors' Hotel, 383 Robert St., R. from $1. A large new hotel (Pl. d; C, 3) is building in St. Peter St.

Restaurants. *Carling, cor. of St. Peter and 5th Sts.; *Frenzel*, 383 Robert St.; *Neumann*, cor. 6th and Cedar Sts.; *Delicatessen*, 321 Robert St., near 4th St.; at the *Ryan* and *Frederick Hotels* (see above). — Frog's legs are a common item in the bills of fare at the restaurants of St. Paul and Minneapolis, which are said to be the largest frog-markets in the world.

Tramways. St. Paul is traversed in all directions by an excellent system of electric cars (fare 5c., incl. transfer to any intersecting line). — *Interurban Electric Tramway* to (10 M.) *Minneapolis* (three lines: 'Minneapolis & St. Paul', 'Como-Harriet', 'Selby-Lake'), starting at or near the Ryan Hotel (fare 10c.; 1-1¼ hr.). — Electric lines also run from St. Paul to various points in the environs. — A *'Sightseer Trolley Car'* (comp. p. 19) runs in summer round the Twin Cities ('40 M. for 50 c.').

Cabs. For 1 pers., 1 M. 50c., 1½ M. 75c., 2 M. $1; each addit. pers. 50c. for the whole hiring; per hr. $1, each addit. hr. 50c., with two horses $1½ and $1. An understanding should be come to before starting.

Steamers ply to all points on the Mississippi (comp. p. 427).

Theatres. *Metropolitan Opera Ho.* (Pl. D, 2); *Auditorium* (Pl. B, C, 3); *Orpheum* (Pl. C, 3); *Grand Opera House* (Pl. C, 3), 6th and St. Peter Sts.; *Majestic Theatre* (Pl. C, 2); *Star Theatre* (Pl. D, 2).

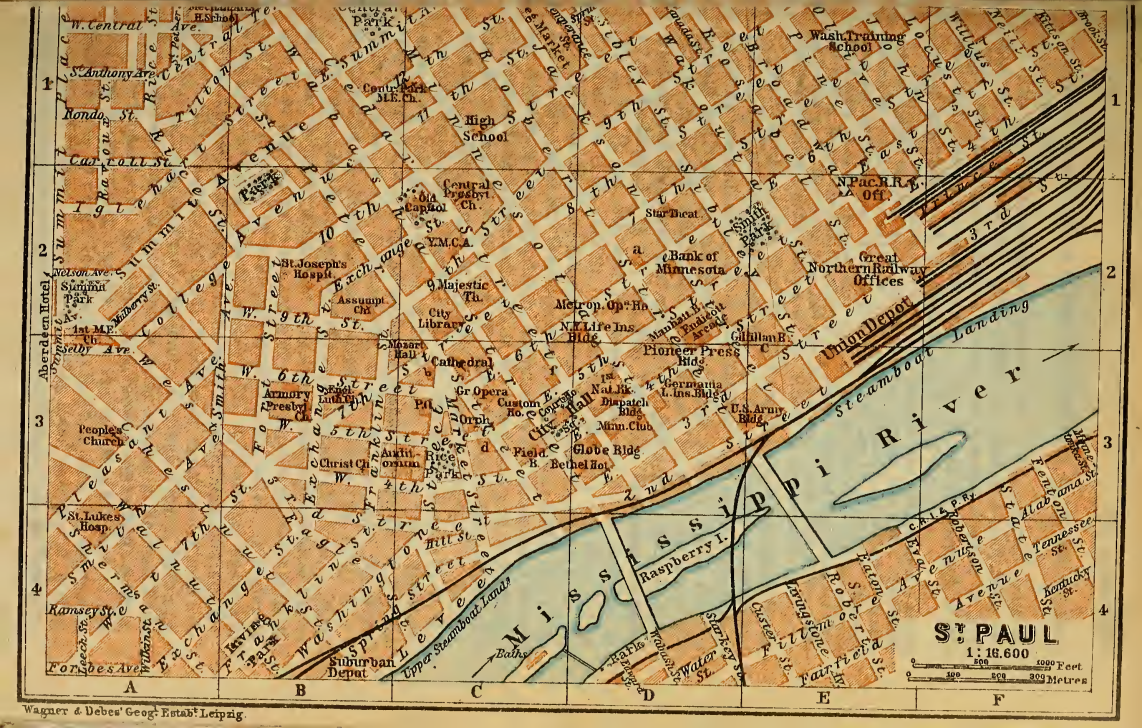
Post Office (Pl. C, 3), Washington St., cor. W. 6th St. (7-7; Sun. 9-10 a.m.).

Consuls. British Vice-Consul, *Mr. J. W. Robinson*, 319 Manhattan Building; German, *Mr. Johannes Grunow*.

St. Paul (700-800 ft. above the sea), the capital of Minnesota, is finely situated at the head of navigation on the *Mississippi*, mainly on a series of terraces rising from the E. (or rather N.) bank. The business part of the town is well-built and regularly laid out, and the suburban quarters contain many fine streets and handsome residences. St. Paul is a great railway-centre, and by rail and river carries on a large wholesale and retail trade. The total value of its industrial products in 1900 was $ 38,500,000 (7,700,000*l.*). The population in 1905 was 197,023.

The first white settler, a Canadian voyageur, built a house here in 1838, and in 1841 the place received its name from a chapel dedicated to St. Paul by a French priest. In 1854, when it received a city charter, it contained 3000 inhab., and since then its growth has been very rapid.

The traveller in St. Paul may begin his visit by ascending to the top of the *Pioneer Press Building* (Pl. D, 2, 3), a 13-story building at the corner of 4th and Robert Sts. (elevator). Another good view is



Wagner & Debes' Geogr. Estab.t Leipzig.

obtained from the dome of the *Old Capitol* (Pl. C, 2), still occupied by State offices.

The new ***State Capitol** (beyond Pl. B, 1), erected from the designs of *Cass Gilbert* in 1898-1906, at a cost of $4,500,000, is a large and handsome edifice of granite and Georgia marble, with an unusually successful central dome. The façade is crowned with a bronze quadriga by *D. C. French* and *E. C. Potter*.

The most impressive parts of the interior are the central rotunda (142 ft. high), the two great staircases, the Supreme Court, and the Senate Chamber. The dominant note in the colour-scheme is furnished by Minnesota yellow limestone. The mural paintings are by *La Farge*, *Simmons*, *Blashfield*, *Garnsey*, *Kenyon Cox*, and *H. O. Walker*. In the Governor's Reception Room are paintings by *F. P. Millet*, *Howard Pyle*, *Douglas Volk*, and others. — The *State Law Library* (25,000 vols.) and that of the *State Historical Society* (75,000 vols.) are both housed in the Capitol.

Four blocks to the S. of the Old Capitol are the *Custom House* (Pl. C, 3) and the **City Hall** (Pl. C, 3), the latter a handsome building erected at a cost of $1,000,000. — Among other important buildings in the business-quarter are the *Public Library* (Pl. C, 2; 85,000 vols.); the *Auditorium* (Pl. B, C, 3), a hall for meetings and theatrical performances (10,000 seats); the new *Y. M. C. A. Building* (Pl. C, 2); the *New York Life Insurance Building* (Pl. C, D, 2), cor. 6th and Minnesota Sts.; the R. C. *Cathedral of St. Paul* (Pl. C, 3), 6th St., cor. of St. Peter St.; the *High School* (Pl. C, 1), cor. 10th and Minnesota Sts.; the *Globe Building* (Pl. D, 3), 4th St., cor. Cedar St.; the *Germania Life Insurance Office* (Pl. D, 3; fine view from the roof-garden, occupied by the Commercial Club); the former *Bank of Minnesota* (Pl. D, 2), now used for various offices; the *Manhattan Building* (Pl. D, 2), cor. of 5th and Robert Sts.; the *Gilfillan Building* (Pl. D, E, 2); the *Endicott Arcade* (Pl. D, 2); the *Central Presbyterian Church* (Pl. C, 2); the *Bethel Hotel* (Pl. D, 3), resembling the Mills House of New York (p. 41); the *Minnesota Club House* (Pl. D, 3); the odd-looking *People's Church* (Pl. A, 3); the *Field, Mahler, & Co. Building* (Pl. C, 3), 4th St.; and the *Great Northern* and the *Northern Pacific Railway Offices* (Pl. E, 2).

The finest residence-street is *Summit Avenue (Pl. A, B, 1, 2), of which Mr. Schuyler writes that very few streets in the United States 'give in as high a degree the sense of an expenditure liberal without ostentation, directed by skill, and restrained by taste'. It begins at Wabasha St. and runs from *Summit Park* (Pl. A, 2) along a high ridge. The most prominent dwelling is the large brown-stone mansion of Mr. James J. Hill, President of the G. N. Railroad, containing a good collection of paintings by Corot, Delacroix, Courbet, Troyon, Decamps, etc. A *Roman Catholic Cathedral* is being erected at Summit Park.

From Summit Ave. the visitor may descend to the **High Bridge**, a sloping bridge rising rapidly from the low N. (E.) bank of the Mississippi to the high bluffs on the S. (W.) side. It commands an excellent *View. — To the W. of the town, near the W. end of Summit Ave., by the river, is the extensive *Roman Catholic Seminary*

of St. Thomas Aquinas (comp. Map). On the bluff above, at the end of Grand Ave. (parallel to Summit Ave.), are the various buildings of the *Hill Seminary*, founded by Mr. Hill (p. 389).

The *Indian Mounds*, at *Dayton's Bluff*, on the Mississippi, just to the E. of St. Paul, command a fine view of the city and river. *Carver's Cave*, in the bluff, was named from Capt. Jonathan Carver, who made a treaty with the Indians here in 1767. Below the bluffs, to the E., is a *State Fish Hatchery*. — *Lake Como* and *Como Park* (with a famous lily-pond) lie about 3½ M. to the N.W. of the centre of the city (tramway). — *Phalen Park and Lake* are about the same distance to the N.E. (tramway). — *Fort Snelling*, a U. S. military post, lies on the W. bank of the Mississippi, at the junction of the Minnesota, 6 M. to the S.W. of St. Paul, and may be reached by electric tramway (5 c.) or by steamer. The ride to the Fort is uninteresting, except for the view from the High Bridge (p. 389). — The **Minnehaha Falls* (see p. 393) may be reached from St. Paul by electric tramway or by river (steamers in summer). — The *Minnesota State Fair* is held in the first week of Sept. in the extensive Fair Grounds to the N.W. of St. Paul (about 300,000 visitors annually). — The State of Minnesota is thickly sown with lakes (7-10,000 in number, covering an area of 4160 sq. M.), and a number of these are within easy reach of St. Paul. Among the largest and most beautiful are *White Bear Lake* (10 M.; trolley, 15 c.; see also p. 393), *Bald Eagle Lake* (11 M.; see p. 393), and **Lake Minnetonka* (20 M.; see p. 393). From *Wildwood*, on White Bear Lake, the trolley goes on to (8 M.) *Stillwater*, on Lake St. Croix (p. 385), with the State Prison (fare 15 c.).

From St. Paul down the Mississippi to *St. Louis* and *New Orleans*, see R. 69.

Minneapolis (10 M.) may be reached from St. Paul by railway (½ hr.) or by the Interurban Electric Tramway (p. 388; 1 hr.).

Minneapolis. — **Railway Stations.** *Union Depot* (Pl. C, 1; restaurant), Bridge Sq.; *Chicago, Milwaukee, & St. Paul* (Pl. C, D, 2, 3), Washington Ave., also used by the Rock Island System and by the through-trains of the Soo line; *Minneapolis & St. Louis Railway* (Pl. A, B, 1), Washington Ave. and Fourth Ave. N.; *Chicago Great Western Railway*, Washington Ave. and Tenth Ave. (beyond Pl. A, 1); *Soo Line Depot* (Pl. A, 1), for local trains only.

Hotels. *Plaza (beyond Pl. A, 3), cor. of Hennepin Ave. and Kenwood Parkway, R. from $ 2½; (accommodation for transient guests limited); West Hotel (Pl. a; A, B, 2), Hennepin Ave., cor. 5th St., R. $ 1½-3; Nicollet Ho. (Pl. b; B, 2), Washington Ave., R. from $ 1½; The Holmes (Pl. c; A, 3), Hennepin Ave., $ 2½-4, R. from $ 1; Majestic (Pl. g; A, 3), Hennepin Ave., cor. 7th St., R. from $ 1; Brunswick (Pl. d; B, 2), R. from 75 c.; Vendome (Pl. e; B, 2), 4th St., near Hennepin Ave., R. from $ 1; Hyser (Pl. f; B, 2), cor. of 4th St. and Nicollet Ave., R. from 75 c. A large new hotel (Pl. h; A, 3) is building in 7th St.

Restaurants. At the hotels; *Restaurant in *Donaldson's Glass Block Store* (Pl. B, 3); *Scheik's*, Third St. S., near First Ave.; *Kaiserhof*, 242 Nicollet Ave.; *Crombie*, 16 Fifth St. S.; *Dayton's*, Nicollet Ave., cor. 6th and 7th Sts.; *Dorner*, 315 First Ave. S.

Tramways and Cabs as in St. Paul (see p. 388). The Interurban Lines (p. 388) start at the West Hotel. — **Observation Automobiles**, starting from the West Hotel, make tours of Minneapolis and vicinity (fares from 50 c. to $ 2½ according to length of trip).

Theatres. *Metropolitan Opera House* (Pl. B, 2), 3rd St.; *Lyric* (Pl. A, 3), Hennepin Ave.; *Orpheum* (Pl. A, 3), 7th St.; *Bijou* (Pl. B, 2), Washington Ave.; *Auditorium*, Nicollet Ave. (beyond Pl. A, 4; symphony concerts fortnightly in winter); *Miles Theatre*, 7th St.

Post Office (Pl. B, C, 2), Third St. (7.30 a.m. to 9 p.m.; Sun. 10-11 a.m.)

1 : 100.000
Stat. M.
Kilometres.
MINNEAPOLIS
First Ward Park
Maple Hill Cemetery
Nicollet
Union Depot
Sawmills
State University
University Av. Sta.
Hawthorne Park
Elliot Park
Loring Park
Riverside Park
Prospect Park
South Minneapolis
Lake Street
Powder Horn Pk.
Driving Park
St. Mary's Cem.
Rice L.
Minnehaha Falls
Minnehaha Creek
Minnehaha
Lake Amelia
Pearl L.
City Limits
Minnesota Soldier's Home
Fort Snelling
Mississippi
St. Anthony Park
Fair Ground Driving Pk.
State Agr. Society
Como L.
Como Park
Como Av.
Shops
Hamline
Hamline Univ.
Minnes. Transfer
Desnoyer Park
Merriam Park
Concordia Coll.
Macalester
Lexingt. Pk.
St. Thomas Semin.
St. Paul Semin.
Macalester Col.
Summit Avenue
Ridgewood Park
Murray Hill
Norweg. Semin.
Warrendale
Calvary Cemetery
Oakland Cemetery
Mississippi St. Jc.
New Capitol
ST. PAUL
Union Depot
McCarron L.
Echo Lake
Sandy L.
City Water Works
Gladstone
L. Phalen
Merrill Villa
Rice Sta.
Soo Line
Claymont
East 7th St. Sta.
Rifle Bark
Dayton's Bluff
West St. Paul
State Street
High Br.
Annapolis Street
City Limits
South Park
Lake Harriet
Minnetonka Lake
MINNEAPOLIS
1 : 21.600
Feet.
Metres.
Mississippi River
Nicollet Island
Hennepin I.
Falls of St. Anthony
Union R.R. Viaduct
Corn Mills
Union Depot
Bridge Sq.
Chicago Milwaukee & St. Paul Depot
Corn Exchange
Chamber of Commerce
Court Ho. & City Hall
Elliott Park
Met. Life Bldg.
P.O.
Met. Opera
Tribune
Lumber Exchange
Bijou
Temple Court
Boston Bl.
Globe Bldg.
Masonic Temple
Andrus Bldg.
Syndic. B.
Lyric Th.
Glass Block
Dayton B.
Unitarian Church
Thomas Bldg.
Public Libr.
First Baptist Church
Central Market
Soo Line Dep.
Washington Avenue
Hennepin
Nicollet
Holden St.
Western Av.
1st Av.
Hawthorne
10th St.
11th St.

Minneapolis (800 ft.), the largest city in Minnesota and the chief flour-making place in the world, lies on both banks of the Mississippi, a little above St. Paul, at the point where the river descends over the *Falls of St. Anthony*. The population in 1905 was 261,974, including many Scandinavians.

Minneapolis owes its prosperity and rapid growth to the extensive agricultural district tributary to it, and to the splendid water power of the St. Anthony Falls, with an available perpendicular fall of 50 ft., yielding about 50,000 horse-power. The falls were named by Father Hennepin (p. 148) in 1680, but it was not till 1846 that the village of *St. Anthony*, now included in Minneapolis, was founded on the E. bank of the river. The settlement on the W. bank, which received the name of *Minneapolis* (from *minne*, the Sioux for water, and the Greek *polis*), was founded in 1856 and became a city in 1867. In 1870 the population was 13,000, and in 1880 it was 46,000, while the next decade showed an increase of 252 per cent.

Its *Flour Mills*, 20-25 in number, have a daily capacity of about 85,000 barrels and produce about 16 million barrels annually. Its *Lumber Mills* yearly cut 600 million ft. of timber. The total annual value of its manufactures, which also include iron goods, machinery, street-cars, etc., is about $140,000,000 (28,000 000 *l.*). Its trade is also very large, the chief import being grain (200,000,000 bushels) and the chief exports flour and timber. The best shops are in Hennepin and Nicollet Avenues.

At the corner of Second Ave. South and 3rd St. stands the **Metropolitan Life Building* (Pl. C, 2), erected in 1888-90 at a cost of $1,600,000. The roof (172 ft. high, tower 48 ft. more) commands an excellent *View of the city (adm. 10 c.). Adjacent is the *Post Office* (Pl. B, C, 2), in a Romanesque style.

We may now follow 3rd St. to the N.W. to Hennepin Avenue (Pl. A-C, 1-3) and turn to the left. To the left, at the corner of N. 5th St., is the imposing *Lumber Exchange* (Pl. B, 2). To the right are the *West Hotel* (p. 390) and the *Masonic Temple* (Pl. A, 3). At the corner of 8th St. is the **Private Art Gallery of Mr. T. B. Walker* (open to the public from 8 till dusk), containing good specimens of the British portrait-painters and of the Barbison school and also works by or ascribed to Raphael, Michael Angelo, Rubens, Rembrandt, Van Dyck, Holbein, and Murillo.

Farther on, at the corner of 10th St., is the **Public Library and Art Gallery** (Pl. A, 3), a Romanesque structure, with an ornate façade.

The *Library* (190,000 vols.) and *Reading Rooms* (open 8.30 a.m. to 10 p.m.) are on the first floor. Upstairs is the *Art Gallery* (10-12 & 1.30-6; Sun., 2-10), containing pictures, casts, bric-à-brac, etc. Among the pictures belonging to the Gallery are *De Neuville's* 'Storming of Tell el-Kebir' and examples of *David*, *Lefebvre*, *Kaulbach*, *Ribera*, *Bohm*, *Le Brun*, *Inness*, and *Rosa Bonheur*. Among the Baker 'Incunabula' are two that belonged to Melanchthon. — On the second floor are the collections of the *Minnesota Academy of Natural Sciences*. — The building also includes a *School of Art*.

Adjoining the Public Library is the *First Baptist Church* (Pl. A, 3, 4), opposite which is the building of the *Y. M. C. A.* At the corner of 16th St. is the new *Roman Catholic Cathedral*.

Other prominent churches are the *First Unitarian Church* (Pl. A, 3), at the corner of Mary's Place and 8th St.; the *Westminster Presbyterian Church* (beyond Pl. A, 4), Nicollet Ave.; the *Church of the Redeemer* (Pl. B, 4); the *Fowler Methodist Episcopal Church*, on Lowry Hill (comp. p. 392); the *Second Church of Christ, Scientist*; *Plymouth Church*; and *St. Mark's Cathedral*.

At the other end of Hennepin Ave. is the *Union Depot* (Pl. C, 1) The bridge at its foot leads to the *Nicollet Island* (Pl. C, D, 1). — Among other prominent buildings in the business-quarter are the ***Court House & City Hall** (Pl. C, 3), a handsome building in 4th St., completed in 1902 at a cost of $ 3,000,000, with a tower 345 ft. high (*View of city); the *New York Life Insurance Building* (Pl. B, 3), 5th St. and Second Ave., with an elaborate interior; the *N. W. National Bank* (Pl. B, 3); the *First National Bank*, the *Andrus Building* (Pl. B, 3); *Donaldson's Glass Block Store* (Pl. B, 3); the *Security Bank Building* (Pl. C, 3; fine interior); and the *Chamber of Commerce*, 4th St. S. and Fourth Ave.

The **Flour Mills** of Minneapolis, perhaps its most characteristic sight, are congregated on the banks of the Mississippi, near *St. Anthony's Falls* (Pl. D, 2; p. 391). Previous application will generally secure admission to any of the larger mills.

Little is now to be seen of the *Falls*, which are 'cribbed, cabined, and confined' by dams, retaining walls, and a huge wooden 'apron'. Among the largest mills are those of the *Washburn-Crosby Co.*, on the right bank, with a production of 16,000 barrels a day. *The Pillsbury A Mill* (office in the Metropolitan Life Building), on the left bank, with a capacity of 15,000 barrels, is the largest single mill in the world (order necessary for visitors; morning the best time, as packers often stop work at 4 p.m.). The *Russell-Miller Mill* (2500 barrels) is also worth visiting, especially at night. Comp. p. 391. — The *Grain Elevators*, with a capacity of 40 million bushels, are also interesting. The *Union Elevator* holds 2½ million bushels.

A visit should also be paid to the **Lumber Mills**, the operations of which are of an extremely interesting nature.

The mill of the *Bovey De Laittre Lumber Co.*, 3 M. above the city (Camden Place electric tramway), is a good specimen of a modern mill, cutting 25-30 million feet of timber yearly. The logs, each provided with its owner's mark, used to be floated down the river and guided as far as possible into their proper 'booms', but they are now largely brought by railway. The logs which come by river are drawn up an inclined plane into the mill by an endless chain with large hooks, passed under the 'gang' saw, and sawn into planks before they are well out of the water. Among the various improvements in machinery, with the object of minimizing the waste of sawdust, are the wonderfully delicate band-saws.

The **University of Minnesota** (comp. Map) lies on the left bank of the river, between Washington and University Avenues. It possesses various well-equipped buildings and is attended by 4400 students (both sexes).

Within the urban limits of Minneapolis are fourteen wooded lakes, while the gorges of the Mississippi and the *Minnehaha Creek* are very picturesque. These natural features have been made the basis of a fine system of ***Boulevards** (35 M. completed), of which the visitor should not fail to make a circuit by carriage (4 hrs.) or automobile (1½ hr.; 4 pers., $ 6).

The first part of the Boulevard system, beginning at the Plaza Hotel (p. 390), is the **Kenwood Parkway**, which runs towards the W., skirting *Lowry Hill* and *Mt. Curve*, with many of the handsomest residences in the city. It then leads to the S., up *Kenwood Hill* (view at corner of Mt. Curve Ave., with glimpse of Cedar Lake to the right). The system next encircles the *Lake of the Isles*, *Lake Calhoun*, and *Lake Harriet* (band-concerts in summer.)

[On the N. side of Lake Calhoun two roads diverge for Lake Minnetonka (see below).] From the S.E. side of Lake Harriet the road runs to the E. along the *Minnehaha Creek*, passing *Lake Amelia* (r.), to (6 M.) *Minnehaha Park* (also reached by electric car), containing the graceful *Falls of the Minnehaha, 50 ft. high, immortalized by Longfellow. The smaller fall below has been nicknamed the *Minnegiggle*. On the opposite side of the creek is the *Minnesota Soldiers' Home* (fine grounds). On the other side of the railway and the electric line (which goes on to *Fort Snelling*, p. 390; 2 M.) is the *Longfellow Zoological Garden* (adm. 10-15 c.), with a statue of the poet by Gewont. — From Minnehaha Park the boulevard runs to the N. along the Mississippi, connecting at *Lake Street Bridge* (105 ft.; *View) with Summit Ave. (p. 389). At Franklin Avenue Bridge (95 ft.; view) it crosses the river and ends at the *University of Minnesota* (p. 392).

The most delightful resort near Minneapolis or St. Paul is *Lake Minnetonka (820 ft. above the sea), which lies 15 M. to the W. The lake is singularly irregular in outline, and with a total length of 12-15 M. has a shore-line of perhaps 150 M. It is surrounded with low wooded hills, and is lined with summer-cottages, some of them with beautiful grounds (best at *Ferndale*, on the N. shore). It affords good boating and fishing. The lake is reached by the Minneapolis & St. Louis Railway (S. shore), by the Great Northern R. R. (N. shore), and by electric tramway (fare 25 c.), connecting at *Excelsior* or *Wildhurst* (S. shore) with steamers for all parts of the lake (fare 10 c.). *Big Island Park* (free transfer from electric line) contains a handsome pavilion and numerous amusements. The best hotels are the *Tonka Bay* ($ 3-5), on a peninsula of the S. shore (electric car), and the *Del Otero* ($ 2½-5), reached from *Spring Park* on the G.N.R.R. The *Upper Lake* is wilder than the Lower Lake, and also has hotel and boarding-house accommodation. The *Minnehaha* (p. 392) flows out of Lake Minnetonka.

From Minneapolis and St. Paul to Sault-Ste-Marie, 505 M., *M., St. P., & S. Ste. M. Railway* in 16 hrs. (fare $ 11.95; sleeper $ 3). — This line runs to the N.E. through *Wisconsin* and *Michigan*. Stations unimportant. — 505 M. *Sault-Ste-Marie*, see p. 397.

55. From St. Paul to Duluth.

152 M. Northern Pacific Railway ('Duluth Short Line') in 4½-7⅓ hrs. (fare $ 3; sleeper $ 1.50). — Other routes are the *Eastern Railway of Minnesota (Great Northern R. R. System)* and the *Chicago, St. Paul, Minneapolis, & Omaha Railway*.

St. Paul, see p. 388. The district traversed is comparatively uninteresting. At first we traverse fields of Indian corn and afterwards tracts of forest. Soon after leaving St. Paul we pass between (12 M.) *White Bear Lake* (to the right) and (13 M.) *Bald Eagle Lake* (to the left), two summer-resorts of the citizens of St. Paul (good hotels). 25 M. *Forest Lake* is a similar resort. From (63 M.) *Pine City* a small steamer follows the *Snake River* to (4 M.) *Lake Pokegama*.

152 M. **Duluth** (610 ft.; **Spalding Hotel*, R. from $1; *St. Louis*, $ 2-3, R. from $1; *Lenox*, $ 2-3, R. from $1; *McKay*, $ 2-2½, R. from $1), ambitiously termed the 'Zenith City of the Unsalted Seas', is finely situated on a bay at the W. end of *Lake Superior*, at the mouth of the *St. Louis River*, and contained 64,942 inhab. in 1905. In 1860 Duluth contained only 80 white inhabitants, and even in 1885 it had only 3470; it owes its rapid increase to its situation at the head of the navigation of the Great Lakes, to its

abundant water-power, and to its extensive railway-connections with the rich agricultural states of the West and the iron regions to the N. (see below). It has a large harbour, entered by a short canal (crossed by an ingenious aërial bridge, 135 ft. high and 394 ft. in span) and lined with docks and warehouses, and carries on a very large trade in grain, iron ore, and lumber.

The annual receipts of grain at Duluth amount to 85 million bushels. About 45,000 vessels enter and clear its harbour annually, bringing coal (7,000,000 tons yearly, including Superior) and taking away flour and iron ore. The mills in the Duluth district produced 827 million feet of lumber in 1906. Its manufactures include flour, steel and iron (U. S. Steel Corporation), logging and dredging machinery, beer, and matches.

Ski-running is a favourite pursuit at Duluth, and a jump of 117 ft. was made by John Mangseth at the Chester Creek Hill Slide on Feb. 16th, 1908.

A great part of Duluth is well and substantially built. Among the most prominent buildings are the new *Court House*, the *Schools* (especially the *Central High School* and *State Normal School*), the *Carnegie Public Library* (50,000 vols.), the *First National Bank*, the *Lyceum Theatre*, the *Board of Trade*, the *Sellwood*, *Lonsdale*, *Torrey*, *Wolvin*, and *Providence Buildings*, the buildings of the *Y. M. C. A.* and *Y. W. C. A.*, *St. Luke's Hospital*, the *Marshall Wells Hardware Co.*, and the *Patrick Dry Goods Co.* — The **Boulevard Drive*, on the terrace at the back of the town (an old beach-line of Lake Superior), 4-500 ft. above the lake, affords splendid views of the town and lake (brakes twice daily from Spalding Hotel, fare $1). *Lester Park* lies to the E. and *Lincoln Park* to the W.

From Duluth to Tower and Ely, 117 M., *Duluth & Iron Range R. R.* in 5 hrs. — This line runs to the N.E., along the shore of *Lake Superior*, to the iron-shipping port of (27 M.) *Two Harbors* (4400 inhab. in 1905), and then strikes inland (N.W.), running through a district studded with small lakes (shooting and fishing). — From (73 M.) *Allen Junction* a branch line runs to (27 M.) *Eveleth* (5330 inhab. in 1905), in the *Mesabi Range* (see below). — 98 M. *Tower* (1340 inhab. in 1905), on *Lake Vermilion*, is the starting-point of the route (stage and road) to the *Rainy Lake Gold Fields* (through-fare from Duluth $ 10). — The railway turns to the E. and runs through the *Vermilion Range* (seebelow) to (117 M.) *Ely*, a small mining town with (1905) 4045 inhabitants.

From Duluth to Mountain Iron and Hibbing, 84 M., *Duluth, Missabe, & Northern Railway* in 3¼-3½ hrs. — This line runs towards the N. — 31 M. *Culver*, for *Stony Brook;* 66 M. *Iron Junction*, for lines to *Eveleth* (see above), *Biwabik*, etc. — At (68 M.) *Wolf* the railway trifurcates, the arm to the right going to (74 M.) *Virginia*, that in the middle to (75 M.) *Mountain Iron*, and that to the left to (84 M.) *Hibbing* (6565 inhab. in 1905), three mining camps in the Mesabi Range (see below).

The two railways just described give access to the important mining district of the Mesabi and Vermilion Ranges, which annually produce about 30 million tons of high-grade iron ore (red hematite). In 1907 the Lake Superior Iron Region, which also includes the Marquette, Gogebic, and Menominee districts (comp. p. 395), produced 42,000,000 tons of iron. Lake Superior ore is said to excel even the best Swedish ores in purity, ease of working, and high content of metallic iron.

From Virginia (see above) the *Duluth, Rainy Lake, & Winnipeg Railway* runs to the N. to (ca. 170 M.) *Rainy Lake* (comp. *Baedeker's Canada*).

56. From Duluth to Sault-Ste-Marie.

a. By Railway.

416 M. Duluth, South Shore, & Atlantic Railwa in 17 hrs. (fare $ 12; sleeper $ 2.50).

Duluth, see p. 393. We cross a drawbridge, with *St. Louis Bay*, into which the St. Louis flows, to the right, and *Duluth Harbour* to the left, and enter *Wisconsin* (p. 380). — 5 M. *West Superior*, with grain elevators (one holding 6,000,000 bushels) and ship-building yards, including those of the famous 'whaleback' steel ships; 9 M. *Superior* (Superior, $ 2-3½, R. from $ 1; 36,550 inhab. in 1905, incl. W. Superior), with a large trade in flour, timber, and coal. — Our line runs to the E., a little to the S. of *Lake Superior* (p. 396).

50 M. *Iron River*. — 72 M. *Bibon* (965 ft.) is the junction of a line to (22 M.) **Ashland** (*Hotel Knight*, $ 2½-3½; *Chequamegon*, $ 2-3; 14,520 inhab. in 1905), the shipping-port for the rich hematite Bessemer ore of the *Gogebic Range* (3,000,000 tons yearly). Beyond (104 M.) *Saxon* we pass from Wisconsin to *Michigan* (p. 357). 128 M. *Thomaston* (Rail. Restaurant). *Lake Gogebic* (1330 ft.) lies to the right, 15 M. farther on. 192 M. *Sidnaw*. — 215 M. *Nestoria* (1650 ft.) is the junction of a line to (49 M.) *Houghton* (p. 396), giving access to the valuable copper mines in the peninsula of *Keweenaw*.

The largest of these is the famous *Calumet and Hecla*, one of the most remunerative mining properties in the world. It has already paid about $ 60,000,000 (12,000,000 *l.*) in dividends, and its annual profit is now about $ 4,000,000. The number of miners is 4000. Its No. 4 shaft, 8100 ft. deep, is the deepest inclined shaft in the world, and its Red Jacket Shaft (4920 ft.) is the deepest vertical shaft next to one (18 ft. deeper) at the Tamarack Mine. The total annual product of copper in this district (which includes the towns of *Hancock*, *Calumet*, etc.) is about 150 million pounds.

223 M. *Michigamme* (1585 ft.), with the lake of that name to the right. The numerous mineral trains we meet bear witness to the richness of the iron-yielding land we are traversing. Our line now begins to descend rapidly. — 246 M. *Ishpeming* (11,625 inhab. in 1905) and (249 M.) *Negaunee* (1440 ft.; 6795 inhab. in 1905) are the two chief places of the important mining district of the *Marquette Range*, which annually produce about 4,000,000 tons of iron, besides gold, silver, and marble.

About 30 M. to the S. is the *Menominee Range*, another important iron district (output ca. 5,000,000 tons).

261 M. **Marquette** (600 ft.; *Marquette*, $ 2½-3; *Clifton*, $ 2-3; *Rail. Restaurant*), named from Père Marquette, the French missionary and explorer (of whom a statue has been erected), is a city of (1905) 10,665 inhab., situated on *Iron Bay*, on the S. shore of Lake Superior, and forming the chief outlet for the great iron district of Michigan. The huge iron docks and wharves are seen to the left. *Presque Isle Park* has beautiful walks and drives.

The train now commands glimpses of Lake Superior from time to time, but beyond (291 M.) *Au Train* runs more inland, through

a heavily timbered region affcrding no views. — 299 M. *Munising Junction*, for the short branch-line to *Munising*, a small lake-port with an iron-furnace (comp. p. 397). — 369 M. *Soo Junction*, for a line to (43 M.) *St. Ignace* (p. 362). As we approach Sault-Ste-Marie we skirt the *St. Mary's River* (left; p. 397).

416 M. *Sault-Ste-Marie*, see p. 397.

b. By Steamer.

436 M. Steamers of the *Northern S. S. Co.* weekly in 32 hrs. (inclusive fare, with inside berth, $ 12.50; fare alone $ 8½, berth $ 2-3, meals à la carte); of the *Anchor Line* once or twice weekly in 2½ days (inclusive fare $ 15). Regulations similar to those mentioned at pp. 364, 365.

Lake Superior (600 ft. above the sea) is the largest body of fresh water on the globe, being 380 M. long, and 160 M. wide at its widest part, with an area of about 31,500 sq. M. The mean depth is about 900 ft. The lake receives the waters of 200 streams and contains numerous islands, chiefly near its E. and W. ends. Its coast-line (ca. 1500 M.) is irregular and generally rock-bound, some of its cliffs and mountains being very picturesque. The water is clear and very cold even at midsummer. Lake Superior whitefish *(Coregonus clupeiformis)* are excellent, and other varieties of fish are also abundant.

Duluth, see p. 393. The steamer steers towards the E. and threads its way among the *Apostle Islands* (ca. 25 in all), near the coast.

80 M. *Bayfield* (Parks Hotel, $ 2), a seaside-resort, connected by railway and small steamer with *Ashland* (p. 395). About 50 M. farther on *Porcupine Mt.* (2025 ft.) rises conspicuously, and 20 M. beyond it lies *Ontonagon*. The steamers are saved the long détour round *Keweenaw Point* by passing through *Portage Lake* (20 M. long, ½-2 M. wide) and the ship-canal in connection with it.

200 M. *Houghton* (Douglas House, $ 2½-4), with (1905) 4345 inhab., lies on the S. bank of Portage Lake, in a rich copper district (comp. p. 395). It is the seat of the Michigan College of Mines. On the opposite bank (½ M. off) lies the sister-town of *Hancock* (Hotel Scott, from $ 2½). On emerging from the *Portage Entry*, the steamer crosses *Keweenaw Bay* and steers S. E. by E., passing *Point Abbaye*, the *Huron Islands*, *Big Bay Point*, and *Granite Island*.

280 M. **Marquette**, see p. 395.

About 45 M. beyond Marquette the steamer passes *Grand Island* and then, if the weather permits, approaches as near shore as possible to afford a view of what is considered the finest piece of scenery on the trip, the so-called ***Pictured Rocks.**

These rocks are a series of sandstone bluffs, 300 ft. high, extending along the shore of Lake Superior for a distance of 5 M. and worn by frost and storm into the most fantastic and romantic forms. They owe their name to the vivid hues — red, blue, yellow, green, brown, and gray — with which they are stained. Cascades fall over the rocks at intervals. Among the chief points (named from W. to E.) are *Miner's Castle*, *Sail Rock* (like a sloop in full sail), the *Grand Portal*, and the *Chapel*. Those who wish to examine the Pictured Rocks satisfactorily

Whitefish Bay
Gros Cap
(Lake Superior)
Province of Ontario, Canada
Sault Ste Marie, Ont.
Sault Ste Marie, Mich.
Head of St. Mary's River
Iroquois I.
Iroquois Point
Clene I.
Lake Nan
Route aux Pins Bay
Pine Creek
Old Vessel
St Mary's Rapids
Topsail
Big Point
Monocle I.
Dollar Settlement
Spectacle
North Pond
South Pond
Mission
Iroquois P.O.
Romd
Cedar Pt.
Mosquito Bay
Bay Mills
Birch Pt.
Gladys Str.
Beaver Mdw.
Waiska Bay
Duluth
St Paul
ST. MARY'S RIVER
1:400000
Kilometres
Miles
Bells Ldg
Little L. Bay
George I.
Mc Mahon Dock
Palmers Pt
Partridge Pt
Pt Louis
Squirrel I.
Clarkstone
Sand R.
Echo Bay
Echo River
Brassor
Hay Pt
Mary Pt
Whippoorwill Pt
Gun I.
Whipple Pt
Nine Mile Pt
Dumpkin Pt
Rock I.
Advance I.
Birch Pt.
Captias Rock
Duck I.
Shingle Pt
Bullion Pt
Thorne Pt
Sutton I.
Goulainger Pt
Horse I.
Shoal
St Joseph Chan.
Keweenaw Pt
Bear I.
Rossean
Richards Isl.
Field Pt
Grape I.
Mud Lake
Mud Lake Island
Sailors Encampment
Mosquito Pt.
Keppes
Province of Ontario, Canada
Ontario
Michigan
Lake Huron
Lake George
Lake Nicolet
Lake Munuscong
Munuscong Bay
Munuscong I.
Mich.
Ore Dock
Steel Plant
The Lake Sup. Corporation
Commercial D.
Davignon Point
L. S. & P. Canal
Canadian canal
Remedial Works
Whitefish I.
ST. MARY'S RAPIDS
Canadian Bridge
International Bridge
Dam
Out. Dock & Coal Co.
Butterfield's Dock
Ferry Dock
Government Dock
Sault Ste Marie, Ont.
Sudbury
Ottawa
Depot
1:60000
Metres
Feet.
U.S. Canal
Power Ho.
Canal
Old Brady
Kemp D.
Power House
Michigan Sault Power Co.
Freight Dep.
Kelley & Meyer Dock
Sault Ste Marie, Mich.
Shine Dock
Hickler
Sault Ste Marie, Mich:
1 Custom House
2 Post Office & Bank
3 Bank
4 City Hall
5 Court House
6 Carnegie Library

should disembark at Marquette, proceed by railway to *Munising* (p. 396), and there hire a small boat. This is the heart of the Hiawatha country, and Munising occupies the site of the 'Wigwam of Nokomis'.

About 20 M. farther on the steamer passes *Point au Sable* (lighthouse), 60 M. beyond which it rounds *Whitefish Point* (lighthouse) and steers to the S.E. across *Whitefish Bay* towards the mouth of the *St. Mary's River*. This river or strait, which connects Lake Superior with Lake Huron (comp. p. 366), is about 65 M. long and has several islands and lake-like expansions. In entering it we pass through *Waiska Bay*, with *Iroquois Point* to the right (U. S.) and *Gros Cap* to the left (Canada). The *St. Mary Rapids* are avoided by a ship-canal, adjoining which lies the town of (436 M.) *Sault-Ste-Marie*, generally pronounced 'Soo St. Mary' (see below).

The old **St. Mary's or Soo Ship Canal** was constructed by the State of Michigan in 1853-55 and was 1800 yds. long, 100 ft. wide, and 12 ft. deep, with two locks, each 350 ft. long. The present canal, constructed by the U. S. Government, is 2330 yds. long, 108 ft. wide at its narrowest part (the movable dam), and 16 ft. deep. Its original lock (Weitzel Lock) is 515 ft. long, 80 ft. wide, and 39½ ft. deep. It has a lift of 18 ft. and can hold two large lake-steamers. The total cost of the canal enlargement was $ 2,150,000. Even this, however, proved inadequate for the increasing traffic, and an enormous new lock (Poe Lock), on the site of the two old locks of 1855, was opened in 1896, having a length of 800 ft., a breadth of 100 ft., and a depth of 43¼ ft. It can accommodate vessels drawing 20 ft. The cost of this new lock and the accompanying enlargement of the canal was about $ 5,000,000. The lock can be filled and emptied in 7 minutes. Another new lock, 1350 ft. long and 80 ft. wide, is now in progress. A large *Obelisk* (60 ft. high) has been erected to commemorate the construction of the canal. — A *Ship Canal*, 1⅛ M. long, has also been constructed on the Canadian side of the river (see *Baedeker's Canada*).

The annual tonnage of the vessels passing through the Soo Canal is three times as great as that passing through the Suez Canal. In 1907 the canal (including the Canadian channel) was passed by 20.437 vessels with an aggregate tonnage of 44,087,094 tons (Suez Canal 14,728,434 tons).

Sault-Ste-Marie (615 ft.; *Iroquois*, $ 3-5; *Park*, $ 3-5; *Manitou*, $ 2; *Rail. Restaurant*), a thriving little city with (1905) 11,440 inhab., originated in a French mission established here in 1641. Its position on the Soo Canal and at the convergence of several railways gives it a considerable commercial importance, while its huge chemical and other works show its growing industrial importance. Enormous water-power has been developed from the Rapids (see below). Among the chief buildings are the *Custom House* (Pl. 1), the *Post Office* (Pl. 2), the *City Hall* (Pl. 4), the *Carnegie Library* (Pl. 6), and the *Court House* (Pl. 5). To the W. lies *Fort Brady*, a U. S. military post (comp. Plan). The St. Mary's River is crossed here by the fine bridge of the Canadian Pacific Railway. Steam-ferries cross to the Canadian *Sault-Ste-Marie* (Algonquin Ho., from $ 2; pop. 7169).

One of the things to 'do' at the Soo is to shoot the *Rapids* in a canoe guided by an Indian, an exciting but reasonably safe experience (inquire at hotels). There is good trout-fishing above the Rapids and in the neighbouring streams, and the Indians catch whitefish with scoop nets below the Rapids. — The island of *Mackinac* (p. 362) is easily reached from the Soo. — From Sault-Ste-Marie to *Buffalo* by steamer, see R. 50e.

Four-horse coaches meet some of the steamers for a drive round the 'Soo' (fare $ 1).

57. From St. Paul to Winnipeg.

a. Viâ Breckenridge.

488 M. Great Northern Railway in 14 hrs. (fare $ 10; sleeping car $ 3). Through-tickets are issued to points on the Pacific Coast over this route ('Manitoba-Pacific Route') in connection with the *Canadian Pacific Railway* (comp. *Baedeker's Canada*).

St. Paul and (11 M.) *Minneapolis*, see R. 54. Our train now runs to the N.W. through the beautiful *Lake Park District* of Minnesota, thickly sprinkled with lakes (comp. p. 390). From (23 M.) *Wayzata*, at the E. end of *Lake Minnetonka* (see p. 393), a branch-line runs to *Hotel Del Otero* (p. 393) and (7 M.) *Spring Park*. Numerous small stations are passed, in a thriving farming district. 76 M. *Litchfield* (Howard, $ 2), a summer-resort on *Lake Ripley*. — 102 M. *Willmar* is the junction of a line to (147 M.) **Sioux ('Soo') Falls** (*Cataract Ho.*, $ $2\frac{1}{2}$-$3\frac{1}{2}$), in *South Dakota* ('Coyote State'), and (225 M.) **Sioux City** (*Hot. Garretson*, R. from $ 1; *Mondamin*, $ 2-$3\frac{1}{2}$), in Iowa.

The first of these has a large water-power from the *Big Sioux River* and contains (1905) 12,285 inhab. and extensive flour-mills. It is the seat of the *Dakota Penitentiary* and the *State Deaf and Dumb Institute*. — *Sioux City* is an important manufacturing centre with (1905) 40,950 inhab., a large foundry, and several pork and beef packing houses.

From (132 M.) *Benson* a line runs to *Watertown* and *Huron*. Other lines diverge to the W. and E. at (192 M.) *Tintah Junction* and (197 M.) *Yarmouth*. At (214 M.) *Breckenridge* we reach the *Red River* (p. 399), which we cross to (215 M.) *Wahpeton* (960 ft.; 2740 inhab. in 1905), in *North Dakota*.

Two lines of the G. N. Ry. ascend the *Red River Valley* (p. 399), one on each side of the river. Through-trains generally follow that on the W. bank, which they reach on crossing from (260 M.) *Moorhead* (p. 439) to (261 M.) *Fargo* (900 ft.; p. 439), where the G. N. Ry. intersects the Northern Pacific R. R. (R. 71). Fine fields of wheat are passed. — 339 M. **Grand Forks** (830 ft.; *Northern*, $ 2-$2\frac{1}{2}$; *Dacotah*, $ 2-4), with (1905) 10,125 inhab., large lumber mills, and the *State University of North Dakota* (1000 students), is the junction of the G. N. R. line to Montana described in R. 70. — 419 M. *Neche*, on the 49th parallel of N. lat., is the last station in the United States, and (420 M.) *Gretna* is the first in Canada (custom-house examination). We now run over the tracks of the *Can. Pacific Railway*, through a district peopled with Scots, French half-breeds, and Mennonites.

488 M. **Winnipeg** (**Royal Alexandra*, *Queen's*, *Empire*, etc.), see *Baedeker's Handbook to Canada*.

b. Viâ Fergus Falls.

458 M. Great Northern Railway in 14 hrs. (fares as above).

St. Paul and (10 M.) *Minneapolis*, see R. 54. The train ascends on the W. bank of the *Mississippi*. 24 M. *Osseo*; 33 M. *Rogers*; 48 M. *Monticello*. — At (75 M.) **St. Cloud** (1030 ft.; *Grand Central*,

$2), a city of (1906) 9420 inhab., with large granite quarries, the line from St. Paul unites with that from Duluth (p. 393). It is also the junction of a line to Willmar (p. 398). — Farther on we pass through a country so thickly sprinkled with lakes that the line has often had to be led across them on trestles. From (117 M.) *Sauk Centre* a branch-line runs to the N. to (140 M.) *Cass Lake*. 130 M. *Osakis* (Idlewild, Lake Ho., $2), on the pretty lake of that name; 141 M. *Alexandria* (Letson, Geneva Beach Ho., $2), a summer-resort, with good fishing and shooting; 170 M. *Ashby* (Hotel Kittson, $2½). At (187 M.) *Fergus Falls* (Grand, $2), with (1905) 6690 inhab., the descent of the infant Red River is used by mills and factories. We now run through the interminable wheat-fields of the fertile **Red River Valley**, one of the great wheat-growing regions of the world, its crop often amounting to 50 million bushels. Numerous grain-elevators are seen. 217 M. *Barnesville*. Our line keeps to the right (N.). — 235 M. *Glyndon* (p. 439); 299 M. *Crookston* (see below). We are here joined by the line running viâ Moorhead (see p. 398). — At (392 M.) *Emerson* we enter Canada. — 458 M. **Winnipeg**, see p. 398.

c. Viâ Crookston and Pembina.

482 M. Northern Pacific Railway in 17½ hrs. (fares as at p. 398).

From St. Paul to (224 M.) *Winnipeg Junction*, see p. 438. Our line here diverges to the right from the main line (R. 71) and runs to the N.W. through *Red River Valley* (see above). — 293 M. *Crookston* (p. 434); 320 M. *Grand Forks* (p. 393); 369 M. *Grafton*. Beyond (414 M.) *Pembina* we enter Canada. Hence to (482 M.) **Winnipeg**, see *Baedeker's Handbook to Canada*.

58. From Chicago to St. Louis.

a. Viâ Illinois Central Railroad.

293 M. Railway in 8-9¼ hrs. (fare $7.50; sleeper $2, parlor-car $1, reclining chair car free; library-car on best trains, with books and magazines).

From Chicago to (56 M.) *Kankakee*, see p. 401. Our line crosses the *Kankakee River* and runs towards the S., through an ocean of maize or Indian corn. At (80 M.) *Gilman* the St. Louis train diverges to the right (S.W.) from the through-line to Centralia, Fulton, and New Orleans (see R. 93). 123 M. *Laurette*, the junction of a cross-line to Rantoul (p. 588). At (148 M.) *Clinton* (Magill Ho., $1½-2) a branch-line diverges to (21 M.) *Decatur* (p. 401). At (170 M.) *Mt. Pulaski* our line is crossed by that from Peoria to Evansville (p. 417). — 193 M. *Springfield* (p. 400). 236 M. *Litchfield*; 257 M. *Alhambra*; 289 M. *Bridge Junction*; 290 M. *East St. Louis* (p. 409).

293 M. **St. Louis**, see p. 410.

It should be noticed that some of the trains entering St. Louis, both on this and other lines, do not touch E. St. Louis but cross the Merchants' Bridge (p. 415) and skirt the levee on the W. side of the river.

b. Viâ Chicago and Alton Railway.

284 M. Railway in 8-10½ hrs. (fares as at p. 399).

Chicago (Canal St. Depot), see p. 366. The line runs to the S.W. through the prairies of Illinois, passing at first several suburban stations. 33 M. *Lockport* (2659 inhab.), the terminus of the Chicago Drainage Canal (p. 373); 37 M. *Joliet* (p. 420). — 74 M. *Dwight*, the original home of Keeley's 'Gold Cure'.

At Dwight diverges (to the right) the line for (80 M.) *Peoria*, to which solid through-trains run from Chicago in 4¾ hrs. — **Peoria** (*National*, $ 2½-4, R. from $ 1; *Fey*, $ 2½-3½; *The Grant*, $ 2-3), a busy industrial city with (1900) 56,100 inhab., is celebrated for its whiskey and has many substantial buildings. The value of its industrial products in 1900 was $ 48,871,596. It is also connected by through-trains with Kansas City and St. Louis.

124 M. *Normal*, with large nurseries, the State Normal College, and a Soldiers' Orphan Home. — 126½ M. **Bloomington** (825 ft.; *The Hills*, from $ 2; *The Illinois*, *Folsom*, $ 2½), a busy manufacturing town of 23,286 inhab. and an important railway-centre.

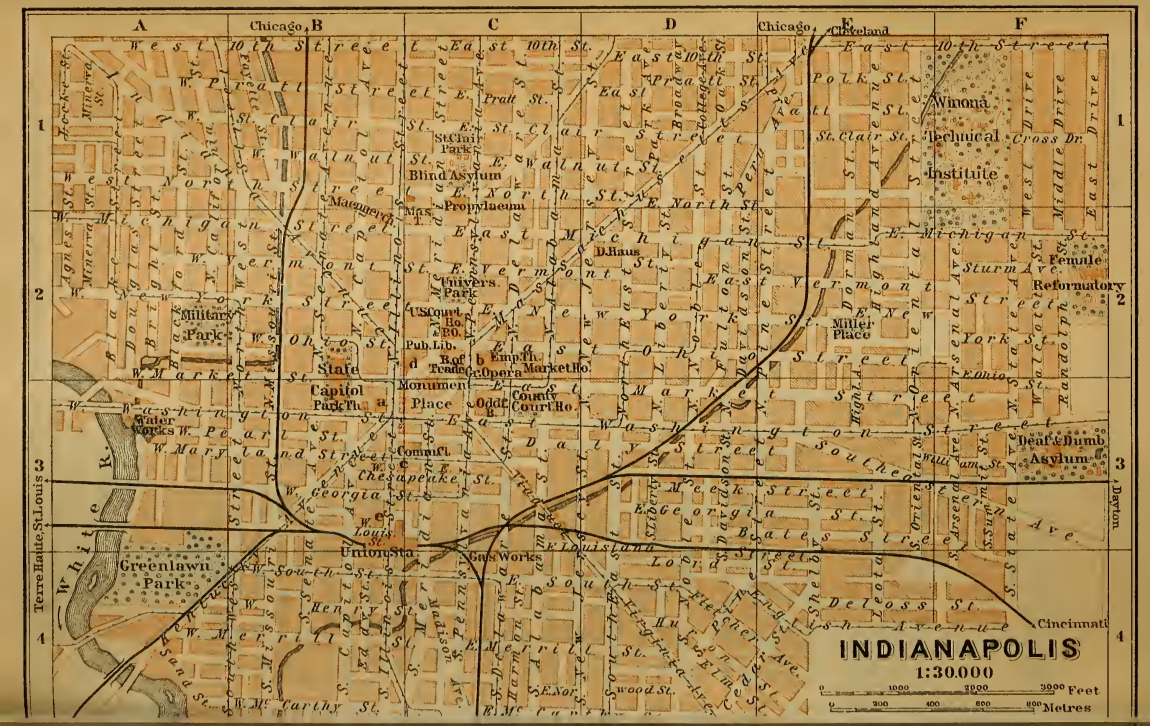
185 M. **Springfield** (630 ft.; *Leland Ho.*, $ 3, R. $ 1½-2½; *St. Nicholas*, $ 2), the capital of Illinois, is a well-built and tree-shaded city of 34,159 inhab. ('Flower City'), the trade and industry of which are promoted by the rich coal-mines whose smoke is visible all round. The *State Capitol* is a large building, with a dome. The *State Arsenal* and the extensive manufactory of the *Illinois Watch Co.* repay a visit. *Oak Ridge Cemetery*, 2 M. to the N., contains the grave of Abraham Lincoln (1809-65), marked by a handsome monument, erected in 1874 at a cost of $ 200,000 (40,000 *l.*). The house he occupied when elected President in 1861 is in Eighth St., four blocks from the *Court House*. It now belongs to the State and is open to the public, but its contents do not date from Lincoln's occupancy. — 211 M. *Girard*; 252 M. *Godfrey*. — 257½ M. **Alton** (470 ft.; *Madison*, $ 2½), an industrial city of 14,210 inhab., lies on high ground on the E. bank of the *Mississippi*, 3 M. above the mouth of the Missouri. In 1897 a monument was erected here to Elijah P. Lovejoy (1802-37), the anti-slavery martyr. — The train descends along the Mississippi and at (281 M.) *East St. Louis* (p. 409), crosses it by a fine bridge (p. 415).

284 M. **St. Louis**, see R. 63.

c. Viâ Wabash Railroad.

286 M. Railway in 8-10 hrs. (fares as at p. 399).

Chicago (Dearborn Station), see p. 366. The course of this line is very similar to those above described. Most of the stations named below are points of junction with other lines. — 34 M. *Steele*;


A
B
C
D
E
F
Chicago
Chicago
Cleveland
1
2
3
4
West 10th Street
East 10th St.
East 10th Street
Broadway
College Ave.
Pennsylvania Street
Delaware Street
Alabama Street
Meridian Street
Illinois Street
Capitol Avenue
Senate Ave.
Fall Creek Boulevard
Boulevard Place
Park Ave.
Central Ave.
Winona
Technical
Institute
Cross Dr.
West Drive
Middle Drive
East Drive
St. Clair Street
E. Walnut St.
E. North St.
E. Michigan St.
E. Vermont St.
E. New York Street
E. Ohio St.
E. Market Street
E. Washington Street
E. Maryland St.
E. Georgia St.
E. South St.
E. Merrill St.
E. Morris St.
E. Louisiana St.
E. Raymond St.
E. Prospect St.
Fletcher Ave.
Shelby Street
Madison Ave.
Meridian St.
Lord Street
Deloss St.
Cincinnati
Dayton
Terre Haute, St. Louis
Monon R.
White R.
Canal
Water Works
Military Park
State House
Capitol Park Th.
Monument Place
Univers. Park
St. Clair Park
Blind Asylum
Propylaeum
Masonic Temple
U.S. Court Ho.
Pub. Lib.
Post Office
Trade
Emp. Th.
Opera
Market Ho.
County Court Ho.
Odd Fellows
Commercial
Union Sta.
Gas Works
D. Haus
Miller Place
Female Reformatory
Deaf & Dumb Asylum
Greenlawn Park
INDIANAPOLIS
1:30.000
0 1000 2000 3000 Feet
0 200 400 600 800 Metres

35 M. *Brisbane;* 60 M. *Essex;* 67 M. *Reddick.* From (93 M.) *Forrest* branch-lines run to (17 M.) *Pontiac* and (37 M.) *Streator* and to (65 M.) *Peoria* (p. 400). 113 M. *Gibson;* 124 M. *Lotus;* 132 M. *Mansfield;* 140 M. *Lodge;* 146 M. *Monticello.* At (153 M.) *Bement* we cross the Wabash line from Detroit to Kansas City. — 173 M. *Decatur* (St. Nicholas, $ 2-3), a busy railway-centre (comp. p. 399) with 20.754 inhab., produced goods to the value of nearly $ 6,000,000 in 1900. — 202 M. *Taylorville* (4248 inhab.); 234 M. *Litchfield;* 248 M. *Staunton* (2786 inhab.); 265 M. *Edwardsville Junction,* for (2 M.) *Edwardsville* (4157 inhab.); 278 M. *Granite City;* 283 M. *East St. Louis* (p. 409).

286 M. **St. Louis,** see R. 63.

59. From Chicago to Cincinnati.

a. Viâ Lafayette and Indianapolis.

306 M. Cleveland, Cincinnati, Chicago, & St. Louis Railway (*'Big Four Line'*) in 8-10 hrs. (fare $ 6; sleeper $ 2, reclining-chair $ 1).

Chicago (Illinois Central Station), see p. 366. The train runs along the lake-front (p. 371) to (9½ M.) *Grand Crossing* and then turns to the S. (inland). 56 M. *Kankakee* (625 ft.), a railway and industrial centre with 13,600 inhab., on the *Kankakee River.* Our line now runs to the S.E. and crosses the *Kankakee* and *Iroquois Rivers.* Beyond (86 M.) *Sheldon* we enter *Indiana.* — 131 M. **Lafayette** (590 ft.; *Lahr Ho.*, $ 2½-3½), an industrial city of 18,116 inhab., at the head of navigation on the *Wabash River. Purdue College* has 1820 students of agriculture, engineering, and other practical branches. The battlefield of *Tippecanoe* (see p. 357) lies about 7 M. to the N.

195 M. **Indianapolis.** — Claypool Hotel (Pl. a; B, 3), from $ 3; Denison (Pl. b; C, 2); Grand (Pl. c; B, C, 3), $ 2½-5, R. from $ 1½; English (Pl. d; C, 2), from $ 2, R. from $ 1; Spencer (Pl. e; B, 3), from $ 2. — *Electric Cars* (5 c.) traverse the chief streets. — *Post Office* (Pl. C, 2; p. 402). — *English Opera House*, in the English Hotel Building (see above), high-class plays; *Grand Opera House* (Pl. C, 2); *Majestic*, Illinois St., near Washington St. (Pl. B, 3), polite vaudeville; *Park* (Pl. B, 3), popular plays; *Empire* (Pl. C, 2), burlesque. — Information to visitors given freely at the *Commercial Club* (Pl. C, 3).

Indianapolis (700 ft.), founded in 1821, the capital and largest city of Indiana, with (1900) 169,164 inhab., lies on the W. branch of the *White River*, in the midst of a wide plain. It is a great railway-centre, carries on an extensive trade in live-stock, and produces manufactures to the value of 80 million dollars (16,000,000 *l.*) annually. The chief attraction of the city lies in its beautiful residence-quarter, with its tasteful houses, shady streets, and grassy lawns.

The focus of the city is the circular Monument Place (Pl. C, 3), from which four wide avenues run diagonally to the four corners of the city, all the other streets being laid out at right angles to each other. In the centre of this place rises the Soldiers and Sailors

Monument, 285 ft. high, by *Bruno Schmitz* of Berlin (1893). Round the monument are statues of *Gen. G. R. Clark* (1752-1818), *Gov. Whitcomb* (1795-1852), *President W. H. Harrison* (1773-1841), and *Gov. Morton* (1823-77). A little to the W. is the State Capitol (Pl. B, 2, 3), a large building with a central tower and dome, erected at a cost of $ 2,000,000. At the E. entrance to the Capitol is a *Statue of Gov. Morton* (see above) and near by is that of *Gov. Hendricks* (1819-85). The Marion County Court House (Pl. C, 3), also an imposing edifice, lies to the E. of Monument Place, while to the N. of it is the U. S. Court House & Post Office (Pl. C, 2), erected in 1902-4. To the S. W. of the former is a **Statue of Gen. H. W. Lawton* (1843-99), by A. O'Connor. In University Park (Pl. C, 2) is a *Statue of President Benjamin Harrison* (1833-1901), erected in 1908.

The *John Herron Art Institute*, at the cor. of Pennsylvania Ave. and 16th St. (beyond Pl. C, 1), contains a School of Art and a collection of modern paintings (adm. 25 c., on Sun. afternoon & holidays 10 c.). — Other large and important buildings are the *Blind Asylum* (Pl. C, 1); the *Propylaeum* (Pl. C, 1, 2), owned and controlled by a stock-company of women for literary purposes; the *Deaf & Dumb Asylum* (Pl. F, 3); the *Union Railway Station* (Pl. B, C, 3, 4); the *City Hall*; the *Public Library* (Pl. C, 2; 150,000 vols.); the *Masonic Temple* (Pl. C, 1); the *Oddfellows Building* (Pl. C, 3); the *Deutsche Haus* (Pl. D, 2), a German club-house; the *Maennerchor Building* (Pl. B, 2); and several *Churches*. The *Winona Technical Institute* (Pl. F, 1) is installed in buildings erected for the U. S. Arsenal. The *Central Hospital for the Insane* lies $1\frac{1}{2}$ M. to the W. of the city, beyond the White River. The *Riverside* (N.W.), *Broad Ripple* (N.), *Brookside* (N.E.), *Fairview* (N.), and *Garfield* (S.) *Parks* deserve mention. A visit may be paid to *Crown Hill Cemetery*, 2 M. to the N., and to the large *Manufactories* (iron, terracotta, pork-packers) and the *Union Stockyards* (to the S.W., beyond Pl. A, 4).

Indianapolis is a great centre of electric railways, which radiate hence in all directions, 250 cars leaving the terminal station daily.

Beyond Indianapolis the train continues to run towards the S.E. 215 M. *Fairland;* 222 M. *Shelbyville;* 242 M. *Greensburg*. Numerous small trestles and sand-pits are seen. At (283 M.) *Lawrenceburg Junction* we reach the *Ohio*, which we follow to the E. to —

306 M. Cincinnati *(Central Union Station)*, see p. 405.

b. Viâ Logansport.

299 M. Pittsburg, Cincinnati, Chicago, & St. Louis Railway ('Pan Handle Route') in 8-10 hrs. (fares as at p. 401). This is, perhaps, the best route for a night-journey, as it avoids the often long halt in the noisy station of Indianapolis.

From *Chicago* to (117 M.) *Logansport*, see R. 48 b. At (122 M.) *Anoka Junction* our line diverges to the right from that to Columbus

and Pittsburg (see p. 350). 176 M. *Anderson*. 225 M. *Richmond* (Westcott, $2^1/_2$-$4^1/_2$), with 18,226 inhab., is the entrepôt of a rich agricultural district. At (241 M.) *Eaton* we turn nearly due S. 269 M. *Hamilton*, an industrial town with 23,914 inhab., on the *Miami*.

299 M. **Cincinnati** *(Pan Handle Depot)*, see p. 405.

c. Viâ the Monon Route.

308 M. Chicago, Indianapolis, & Louisville Railway to (184 M.) *Indianapolis*, and Cincinnati, Hamilton, & Dayton Railway thence to (308 M.) *Cincinnati* in $8^3/_4$-$10^3/_4$ hrs. (through-carriages; fares as at p. 401).

Chicago (Dearborn Station), see p. 366. At (21 M.) *Hammond* (Majestic, $2), with 12,376 inhab., we enter *Indiana*. The line then runs S.E. to (88 M.) *Monon*, where we cross the C. I. & L. line from Michigan City (p. 363) to Louisville (p. 567). — 99 M. *Monticello*. — At (184 M.) **Indianapolis** (p. 401) we connect with the Cin., Hamilton, & Dayton line from Springfield. — 223 M. *Rushville* (4541 inhab.); 231 M. *Connersville* (6836 inhab.). At (263 M.) *College Corner* we enter *Ohio*. $282^1/_2$ M. *Hamilton*, see above.

308 M. **Cincinnati**, see p. 405.

60. From New York to Cincinnati.

a. Viâ Pennsylvania Railroad.

757 M. Railway in 19-21 hrs. (fare $18; Pullman car $4).

From New York to (90 M.) *Philadelphia*, see R. 16a; from Philadelphia to (444 M.) *Pittsburg*, see R. 22; from Pittsburg to (637 M.) *Columbus*, see R. 48b.

At Columbus our line diverges to the left (S.) from that to Chicago (comp. p. 350). — 692 M. **Xenia** (920 ft.; *Florence*, $2-$2^1/_2$), a city of 8696 inhab., with paper-mills and twine manufactures, *Wilberforce University* (400 coloured students), a large *Orphan's Home*, and other well-known educational and charitable institutions. — At (717 M.) *Fort Ancient* is a huge prehistoric earthwork, with 5 M. of embankments (now a public park).

757 M. **Cincinnati** *(Pan Handle Depot)*, see p. 405.

b. Viâ Chesapeake & Ohio Railway.

828 M. Railway in 24 hrs. (fare $18; sleeper $4). The F. F.V. (Fast Flying Virginian) Vestibule Limited Train on this route leaves New York at 5 p.m. (no extra charge).

From New York to (90 M.) *Philadelphia* (Pennsylvania R. R.), see p. 156; thence to (186 M.) *Baltimore* (Penna. R. R.), see p. 201; thence to (229 M.) *Washington* (Phil., Baltimore, & Washington R. R.), see p. 210. From Washington to (682 M.) *Ashland*, see R. 90.

At Ashland the line forks, the left branch running viâ *Lexington* (p. 582) to (208 M.) *Louisville* (p. 567). 686 M. *Russell* or *Ironton* (11,868 inhab.), on the Ohio (right) bank of the river; 764 M.

Maysville; 772 M. *South Ripley;* 824 M. *Newport* (p. 408); 823 M. *Covington* (p. 408). We now cross the Ohio to —

828 M. **Cincinnati** *(Central Union Station)*, see p. 405.

c. Viâ Cleveland.

886 M. Railway in 20-25 hrs. (fare $18; sleeper $4). *N. Y. C. R. R.* to (440 M.) *Buffalo; Lake Shore Ry.* thence to (623 M.) *Cleveland;* and *C. C. C. & St. L. Ry.* thence to (886 M.) *Cincinnati.* Buffalo may also be reached by the routes mentioned at pp. 139-144. Through sleeping-cars on the express trains.

From New York to (440 M.) *Buffalo*, see R. 12a; from Buffalo to (623 M.) *Cleveland*, see R. 50a.

From Cleveland the railway runs towards the S.W. 635 M. *Berea;* 698 M. *Crestline* (p. 349); 703 M. *Galion* (p. 409); 737 M. *Delaware* (925 ft.). — 761 M. **Columbus**, see p. 349. — 806 M. **Springfield** (990 ft.; *Arcade*, $2\frac{1}{2}$–$3\frac{1}{2}$), a manufacturing city (agricultural machinery, etc.; value in 1900, $12,777,000) of 38,253 inhab., with fine water-power furnished by the *Lagonda Creek* and *Mad River*. It has a large trade in farm products.

830 M. **Dayton** (745 ft.; *Algonquin, Beckel Ho.*, from $2\frac{1}{2}$), a city of 85,333 inhab., lies at the confluence of the Mad River with the *Great Miami* and manufactures machinery, flour, paper, etc., to the value (1900) of $35,700,000. The *National Cash Register Co.'s* arrangements for the welfare of its 2000 employees repay a visit. On a hill 2 M. to the W. is the *Central National Soldiers' Home*, with 5000 inmates.

886 M. **Cincinnati** *(Central Union Station)*, see p. 405.

d. Viâ Baltimore & Ohio Railroad.

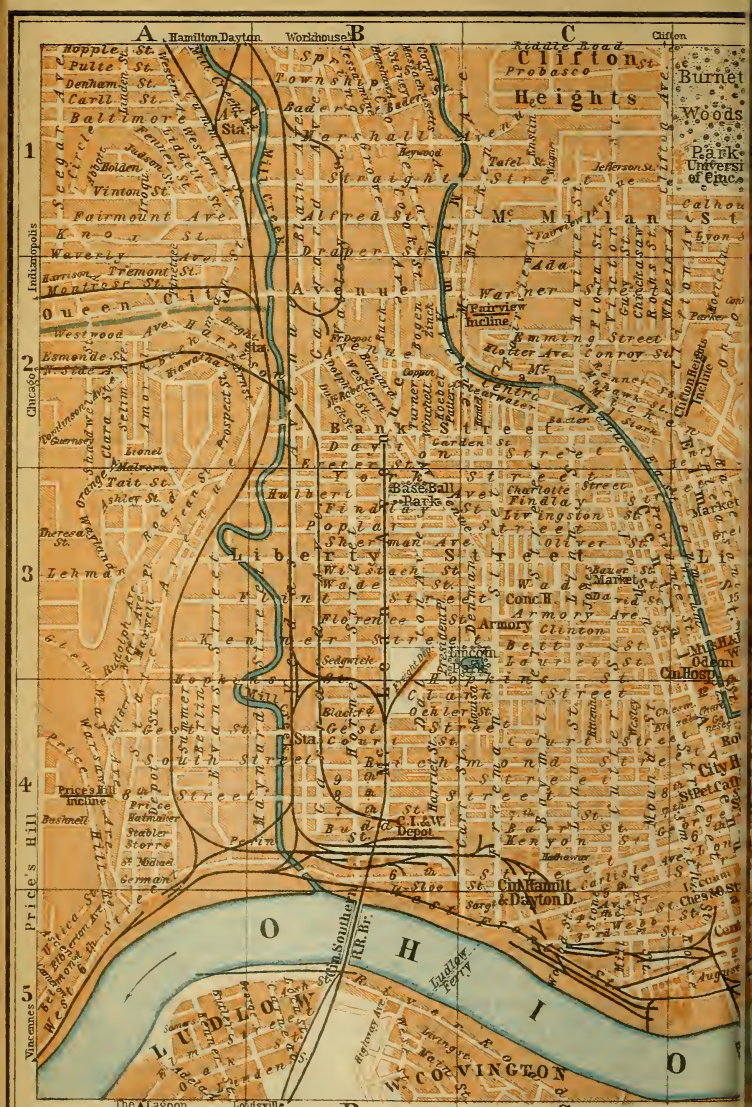
780 M. Railway in 23-25 hrs. (fare $16; sleeper $4).

From New York to (226 M.) *Washington*, see RR. 16b, 25, & 27b; thence to (480 M.) *Grafton*, see R. 49.

From Grafton the line runs to the W. through a somewhat uninteresting district, with petroleum-wells and coal-mines. 502 M. *Clarksburg* (Hotel Waldo, from $2\frac{1}{2}$), on the *Monongahela.* — 584 M. *Parkersburg* (615 ft.; Chancellor, from $2\frac{1}{2}$; Jackson, $2-3\frac{1}{2}$; Blennerhassett, $2-3), a petroleum-trading city, with 11,703 inhab., at the confluence of the *Little Kanawha* and *Ohio*. A branch-line runs hence to (14 M.) *Marietta*, Ohio.

Near *Grantsville*, in the valley of the Little Kanawha, about 50 M. above Parkersburg, are the huge Cabot Carbon Black Works, where 4 tons of soot are daily condensed by 125,000 jets of natural gas.

The train crosses the Ohio river by a fine bridge and enters *Ohio.* We now pass from Eastern to Central time (p. xviii). 586 M. *Belpré.* — 621 M. *Athens* (655 ft.), on the *Hocking*, with 3066 inhab. and Ohio University (1320 students). In the neighbourhood are several Indian mounds. — 681 M. *Chillicothe* (635 ft.), a city of 12,976 inhab., with considerable manufactures, is the centre of a rich agricultural



Wagner & Debes' Geog. Estab. Leipzig

CINCINNATI
1 : 36.500
0 1000 2000 3000 Feet
0 200 400 600 800 1000 Mètres
1 First National Bank E4
2 Ingalls Building D4
3 Payne's " D4
4 Third National Bank D4
5 Traction Building E4
6 Union Trust " D,E4
Avondale
Columbus
German Protestant Cem.
East Walnut Hills
Coney Island
Portsmouth
Mc Millan Street
Auburn
Mount Adams
Eden Park
Reservoir
Art Acad. & Mus.
Pennsylv. Dep.
Water Works
Court St. Sta.
Hosp.
Public Landing
Suspension Bridge
Licking Riv.
L. & N. R.R. Bridge
Central Br.
Park
Lexington
Unit. Ch.
Ch. of St. Francis
Columbia Avenue
Eastern Avenue
Gilbert Avenue
Vine St.
Walnut St.
Main St.
Broadway
Race St.
Elm St.
Plum St.
Central Avenue
Linden Avenue
Hamilton Road
Section Road
Ohio River
Licking River
NEWPORT
VINGTON

district. 738 M. *Blanchester.* At (755 M.) *Loveland* we cross the *Miami.* 769 M. *Norwood.*

780 M. **Cincinnati** *(Central Union Station)*, see below.

e. Viâ Erie Railroad.

873 M. Railway in 24-33 hrs. (fare $16; sleeper $4). Through-cars.

From New York to (729 M.) *Marion Junction*, see R. 29 f. From this point the line follows much the same route as the C. C. C. & St. L. Railway (R. 60 c). 778 M. *Urbana* (p. 350); 792 M. *Springfield* (p. 404); 813 M. *Dayton* (p. 404); 837 M. *Hamilton* (p. 403). 873 M. **Cincinnati**, see below.

61. Cincinnati.

Railway Stations. *Central Union Station* (Pl. D, 5), Central Ave. & 3rd St., used by the C. C. C. & St. L., the B. & O., the C. & O., the C., N. O., & T. P., the L. & N., and other lines; *Pan Handle* or *Pennsylvania Depot* (Pl. F, 4), Pearl & Butler Sts., for the Pennsylvania lines, the L. & N. R. R., the Norfolk & Western, etc.; *Cincinnati, Hamilton, & Dayton Depot* (Pl. C, 4, 5), 6th St.; *Chesapeake & Ohio Station* (Pl. D, 5), 4th St., near Smith St.; *Court Street Station* (Pl. E, 3), for the Cin., Lebanon, & Northern R. R. and other lines. — *Omnibuses* and *Cabs* meet the principal trains (to the hotels, 50 c. each).

Hotels. Sinton (Pl. c; D, 4), Vine St., cor. 4th St., R. $2-5; Havlin (Pl. i; D, 4), Vine St., cor. Opera Place, R. from $2; Grand Hotel (Pl. a; D, 4, 5), Central Ave., cor. 4th St., $3-5, R. from $1½; *St. Nicholas (Pl. b; D, 4), Race St., cor. 4th St., R. from $1½; Alms Hotel, cor. of McMillan St. and Alms Pl. (Pl. F, G, 1), $3-5; Burnet Ho. (Pl. d; D, 4), Vine St., cor. 3rd St.; Gibson Ho. (Pl. e; D, E, 4), Walnut St., near 4th St., R. from $1½; Emery (Pl. f; D, 4), R. from $1; Martin's! 537 Walnut St.; Palace (Pl. g; D, 4), $2½-3½; Lackman, 413 Vine St., near 4th St., R. from $1½; Savoy, 15 E. 6th St., near Vine St., wel, spoken of; Honing, 422 Vine St., near 4th St., R. from $1; The Stag (Pl. h; D, 4), 420 Vine St., R. from 75 c.; Munro, 29 W. 7th Street, with Turkish Baths, R. from $1, these five for men only.

Restaurants. **St. Nicholas Hotel*, see above; *Stag Café*, see above; *Gibson Café*, Walnut St.; *Majestic Café*, 526 Vine St.; *Bismarck*, Mercantile Library Building; *Martin's*, see above; *Salamoni*, 4th St.; *Women's Exchange*, Race St., near 4th St. — *Beer Gardens*, in the German style (concerts in summer), abound on the hills round the city.

Tramways (electric) traverse all the chief streets and suburbs, including *Covington* and *Newport* (p. 408). Some of them afford charming rides of 5-15 M. Uniform fare 5 c. — Cabs: per drive, each pers. 25-50 c.; with two horses, 1-2 pers. $1, each addit. pers. 50 c.; per hr. $2, each addit. hr. $1½; heavy luggage extra. — Four **Inclined Planes** (similar to those at Pittsburg, p. 197) ascend to the tops of the surrounding hills: (1). *Mount Adams* (Pl. E, 4); (2). *Clifton Heights* (Pl. D, 2); (3). *Price's Hill* (Pl. A, 4); (4). *Fairview* (Pl. C, 2). Comp. p. 407. — Steamers ply to the chief ports on the Ohio and Mississippi.

Theatres. *Grand Opera Ho.* (Pl. D, 4), Vine St.; *Walnut St. Theatre* (Pl. D, E, 4), Walnut St.; *Robinson's Opera Ho.* (Pl. D, 4), cor. Plum & 9th Sts.; *Heuck's* (Pl. D, 3), 1213 Vine St.; *People's Theatre* (Pl. D, 3), cor. of 13th and Vine Sts.; *Lyric*, Vine St., between 5th and 6th Sts. (Pl. D, 4); *Odeon* (Pl. D, 3), Elm St.; *Lyceum* (Pl. D, 4), Central Ave.; *Columbia*, or *Fountain Sq. Theatre* (Pl. D, 4), adjoining Fountain Sq.; *Olympic*, 7th St., N. side, between Walnut and Main Sts. (Pl. D, E, 4); *Standard* (Pl. D, 4), Vine St. Some of these are open on Sunday.

Pleasure Resorts (open in summer, with theatrical performances, concerts, etc.). *Zoological Gardens*, see p. 408. — *The Lagoon* (beyond Pl. A, 5), on the Kentucky side of the river, opposite Price's Hill, with park and lake (tramway in ½ hr., 5 c.). — *Chester Park*, 5 M. to the N. (tramway 5 c.). — *Coney Island*. 10 M. up the river, reached by hourly steamers from the foot of Vine St. (Pl. E, 5). — *Queen City Bathing Beach* at Dayton, on the Kentucky side of the river, to the E. of Cincinnati. — *Symphony Concerts*, every fortnight in winter in the Springer Music Hall (p. 407).

Post Office (Pl. E, 4), 5th St. (6 a.m. to 10 p.m.).

German Consul, *Dr. Lettenbaur.*

Cincinnati (430-550 ft. above the sea), the second city of Ohio and one of the most important manufacturing and commercial centres of the Middle West, is finely situated on several terraces rising from the right (N.) bank of the Ohio and is surrounded by an amphitheatre of hills 400-500 ft. high. It has a frontage of 14 M. on the river. The main portion of the city is regularly laid out and its streets are well paved. The chief shopping district is bounded by 4th, Main, 7th, and Elm Sts. The best residential quarters are on the surrounding highlands. In 1900 Cincinnati contained 325,902 inhab., of whom about a third were of German origin. The Germans formerly resided mainly to the N. of the *Miami Canal*, and that district is known as 'Over the Rhine'. On the opposite bank of the Ohio, in Kentucky, lie the cities of *Covington* and *Newport* (p. 408), connected with Cincinnati by five fine bridges.

Cincinnati was settled in 1788 and named in honour of the Society of the Cincinnati (officers of the Army of the Revolution). Mounds containing relics seem to indicate that part of the site was occupied in prehistoric times. By the beginning of the 19th cent. it contained about 7-800 inhab., and in 1819 it received its city charter. Its growth dates mainly from the construction of the Miami Canal (1830) and the advent of the railway system (1840). In 1850 it contained 115,436 inhab. (as compared with 29,963 at Chicago; see p. 369), in 1870 it had 216,239, and in 1890 it had 296,908.

Industry and Trade. The value of Cincinnati's manufactures in 1900 was $ 157,800,000 (31,560,000*l.*), produced by 63,000 hands. The staple articles include iron, machinery, carriages, boots and shoes, furniture, office-furnishings, pianos, soap, printing-ink, decorative pottery, beer, tobacco, and whiskey. Pork-packing is also extensively carried on. Many of the larger plants are outside the Corporation limits, and it is estimated that the annual value of the products of the city and its immediate environs is now at least $ 300,000,000. Its trade, transacted by river and rail, is also very important.

Fountain Square (Pl. D, E, 4), an expansion of *5th Street*, may, perhaps, be called the business-centre of the city and from it start most of the tramway-lines. In the middle of the square stands the ***Tyler Davidson Fountain**, designed by *August von Kreling* and cast at the Royal Bronze Foundry at Munich (1871). To the N., at the corner of 5th St. and Walnut St., is the **U. S. Government Building** (Pl. E, 4), accommodating the *Post Office*, *Custom House*, and *U. S. Law Courts*.

By following 5th St. to the W. and turning to the left down Vine St., we pass the entrance to the *Emery Arcade* (Pl. D, 4) and reach, at the corner of the busy 4th Street, the ***Chamber of Commerce** (Pl. D, 4), designed by *H. H. Richardson* (p. lxxxix). Opposite,

at the N.E. cor. of 4th and Vine Sts., stands the concrete *Ingalls Building* (Pl. 2), 14 stories high. On the N. side of 4th St., between Vine and Race Sts., is the fine *Third National Bank* (Pl. 4).

Following 4th St. towards the W., we soon reach *Plum Street* (Pl. D, 4, 5), which we may follow to the right (N.) to **St. Paul's Protestant Cathedral* (Pl. D, 4; Epis.), at the corner of 7th St.; the *R. C. Cathedral of St. Peter* (Pl. D, 4), at the corner of 8th St. (with an alleged Murillo and other pictures); and the *Synagogue* (Pl. D, 4), opposite the last. In the block bounded by Central Ave. and 8th, 9th, and Plum Sts. is the ***City Hall** (Pl. D, 4), a large red building in a Romanesque style, with a lofty tower (view). A little to the E., in Vine St., between 6th and 7th Sts., is the *Public Library* (Pl. D, 4; 350,000 vols.).

To the N. of this point, 'over the Rhine' (see p. 406), is Washington Park (Pl. D, 3), with the *Springer Music Hall* (p. 406) and the *Exposition Building*.

Among other buildings may be mentioned the *County Court House* (Pl. E, 4), *St. Xavier's College* (Pl. E, 4), the *Oddfellows' Temple* (Pl. D, 4), the *Cincinnati Hospital* (Pl. D, 3, 4), the *Workhouse*, and the *House of Refuge* (both beyond Pl. B, 1). Recent buildings of the modern type include the *Traction Building* (Pl. 5; E, 4), the *Mercantile Library* (Pl. E, 4), the *Union Trust Building* (Pl. 6; D, E, 4), and the *First National Bank* (Pl. 1; E, 4).

The chief park of Cincinnati is **Eden Park** (Pl. E-G, 2, 3), 216 acres in extent, which lies on the hills to the E. and affords fine views of the city and river (band on Sun.). It contains the Art Museum (see below), a storage reservoir of the *City Water Works*, and the *Water Tower*. The top of the last (elevator) affords the best *View of the city and its environs, the river, and the Kentucky Highlands.

We may reach the park by the electric cars from Fountain Sq., which are elevated bodily by the inclined plane railway (Pl. E, 4) and run through the park, past the Art Museum (through-fare 5 c.). [Near the head of the inclined plane is the *Rookwood Pottery* (see below; visitors admitted).] Or we may take the Gilbert Ave. electric cars to the Eden Park Entrance, 5 min. from the Art Museum. [*Elsinore*, a towered gateway, a little farther down Gilbert Ave., on this route, was erected by the City Water Works.]

The **Art Museum** (Pl. F, 3), a handsome group of buildings on a hill-top, some in a Romanesque, others in a Grecian style, is open daily, 9-5 (Sun. 1-5; adm. 25 c., Sun. 10 c., Sat. free; catalogues 10 c.). Adjacent is the *Art Academy* (500 students). Both are maintained by a private corporation.

The collections include *Paintings*, *Sculptures*, *Engravings*, *Etchings*, *Metal Work*, *Textile Fabrics*, *Pottery*, *American Ethnology and Archaeology*, etc. The pictures include a few old masters, some French and English works (*e. g.* Haydon's 'Entry of Christ into Jerusalem'), examples of Lessing and other Germans (esp. of the Düsseldorf School), and specimens of Duveneck, Blum, and many other contemporary American painters. The historical collection of **Rookwood Pottery* (see above; 2000 pieces) and the collections of wood-carving and Oriental art (Japanese embroideries and Indian shawls) are also noteworthy. The *Art Library* (35,000 vols.) is open for reference.

From the top of the *Clifton Heights Inclined Railway* (Pl. D, 2) we may go by electric car to the *Burnet Woods Park* (Pl. D, 1), a fine piece of natural forest. To the S. of it, facing Clifton Ave., are the handsome buildings of the *University of Cincinnati* (Pl. D, 1; 1200 students). — A good view is obtained from the top of the *Price's Hill Inclined Plane* (Pl. A, 4). — The ***Spring Grove Cemetery**, 5 M. to the N.W., is picturesque and contains some interesting monuments. — The ***Zoological Garden** (beyond Pl. D, 1; adm. 25 c.; open daily, Sun. included), reached by electric tramways from Fountain Square, contains a fine collection of animals and is a favourite resort (restaurant; concerts).

The ***Suspension Bridge** (Pl. E, 5), connecting Cincinnati with Covington, was constructed by Roebling (p. 40) in 1865 at a cost of $ 1,800,000 and rebuilt and enlarged in 1897 at an additional cost of $ 500,000. It is 2720 ft. long (including the approaches; between the towers 1005 ft.), 52 ft. wide, and 103 ft. above low-water mark (toll 2 c.). The ******Central Bridge* (Pl. E, F, 5) is a handsome cantilever structure; and there are besides three *Railway Bridges*. The *Levee* or *Public Landing* (Pl. E, 5), below the Central Bridge, 1000 ft. long, usually presents a busy and animated sight.

Covington (42,938 inhab.) and *Newport* (28,300 inhab.) are two uninteresting cities in Kentucky, which need not detain the stranger. They are separated from each other by the *Licking River* (crossed by a suspension bridge) and contain the residences of many Cincinnati merchants. The *U. S. Government Building* in Covington is a good specimen of modern Gothic.

Pleasant drives may be taken to *Walnut Hills*, *Avondale*, *Clifton*, *Spring Grove*, *Price's Hill*, and **Fort Thomas.** The last, one of the most important stations of the U. S. army, is finely situated in the hills behind Newport, partly on a promontory high above the river (view). The daily guard-mounting is accompanied by a band-concert, and there is a dress-parade daily in summer (Sat. and Sun. excepted). It may be reached by electric car in 40 min. (5 c.). — The church of *St. Francis de Sales* (Pl. G, 1), in Walnut Hills, contains a bell weighing 15 tons.

Cincinnati will probably be the most convenient point from which the scientific traveller can visit the famous **Serpent Mound.** This is situated on the bank of *Brush Creek*, in Adams County, Ohio, and the nearest railway-station is *Peebles*, 71 M. to the E. of Cincinnati by the *Norfolk & Western Railway* (Pan Handle Depot, p. 405). The mound, which is 7 M. from Peebles (omn. or carr.), is in the form of a serpent, 1000 ft. long and 5 ft. high, and is 30 ft. wide at the base. The tail ends in a triple coil, and the mouth is open, as if to swallow an oval mound which rests partly between the distended jaws. This oval is 4 ft. high, with diameters of 109 and 39 ft. — Archaeologists may also visit *Fort Ancient* (see p. 403).

From Cincinnati to *Chicago*, see R. 59; to *St. Louis*, see R. 62d; to *Louisville*, *Chattanooga*, and *New Orleans*, see R. 92.

62. From New York to St. Louis.

a. Viâ Cleveland and Indianapolis.

1171 M. Railway in 28½-32 hrs. (fare $ 24.25; through-sleeper $ 6). N. Y. C. R. R. from New York to (440 M.) *Buffalo*, Lake Shore Railway thence to (623 M.) *Cleveland*, and C. C. C. & St. L. R. R. thence to (1171 M.) *St. Louis*.

From New York to (703 M.) *Galion*, see R. 60c. — At Galion our line diverges to the right from that to Cincinnati (see p. 404). 724 M. *Marion;* 764 M. *Bellefontaine* (1215 ft.); 804½ M. *Versailles;* 821½ M. *Union City* (1110 ft.), partly in Ohio and partly in Indiana; 870 M. *Anderson.*

906 M. **Indianapolis** *(Rail. Restaurant)*, see p. 401.

Beyond Indianapolis the train crosses the *White River* and runs to the S.W. through Indiana. 945 M. *Greencastle* (780 ft.), with 3661 inhab. and the Depauw University (Methodist; 975 students). — 978 M. **Terre Haute** (490 ft.; *Terre Haute Ho.*, $ 2½-4; *Filbeck*, $ 3), a busy commercial and industrial city of 36,673 inhab., on the *Wabash River*, with some fine buildings and several educational institutions (comp. p. xcviii). It is an important railway centre, and steamers descend the Wabash hence to Vincennes (p. 410). — The train now crosses the Wabash and enters *Illinois*. 997 M. *Paris* (Paris Hotel, $ 2-3; Central, at the station, $ 2), with 6105 inhab.; 1035 M. *Mattoon* (p. 588). At (1058 M.) *Shelbyville* we cross the *Kaskaskia* and see a lofty trestle to the right (N.). 1074 M. *Pana;* 1113 M. *Litchfield* (685 ft.). From (1148 M.) *East Alton* (470 ft.) the line runs S. along the valley of the Mississippi. At (1168 M.) *East St. Louis*, near which is the *Cahokia Indian Mound* (90 ft. high; see p. lxii), we cross the Eads Bridge (p. 415).

1171 M. **St. Louis**, see p. 410.

b. Viâ Philadelphia and Pittsburg.

1065 M. Railway *(Pennsylvania Lines)* in 27½-31 hrs. ($ 24.25; sleeper $ 6).

From New York to (90 M.) *Philadelphia*, see R. 16a; thence to (444 M.) *Pittsburg*, see R. 22; thence to (720 M.) *Bradford Junction*, see R. 48b. From Bradford Junction the line runs to the S.W. to (758 M.) *Richmond* (p. 402). — 825 M. **Indianapolis** (p. 401). The 'Vandalia Line', which we now follow, takes nearly the same course as the line above described. 861 M. *Greencastle;* 897 M. *Terre Haute* (see above); 965 M. *Effingham;* 977 M. *Altamont;* 997 M. *Vandalia;* 1014 M. *Greenville;* 1062 M. *East St. Louis* (see above).

1065 M. **St. Louis**, see p. 410.

c. Viâ Buffalo and Toledo.

1172 M. Railway in 28½-34 hrs. (fare $ 24.25; sleeper $ 6). *N. Y. C. R. R.* to (440 M.) *Buffalo; Michigan Central R. R.* thence to (736 M.) *Toledo; Wabash R. R.* thence to (1172 M.) *St. Louis.*

From New York to (440 M.) *Buffalo*, see R. 12a; thence to (736 M.) *Toledo*, see R. 50a. — From Toledo the train runs towards the S.W., touching the *Maumee River* at (772 M.) *Napoleon* (680 ft.) and crossing it at (786 M.) *Defiance* (700 ft.). Beyond (807 M.) *Antwerp* we enter *Indiana* (p. 357). At (830 M.) *Fort Wayne* (p. 357) we

intersect the Pennsylvania R. R. and 'Nickel Plate' routes from New York to Chicago. 873 M. *Wabash* (740 ft.); 887 M. *Peru* (685 ft.); 903 M. *Logansport* (p. 350); 940 M. *Lafayette* (p. 401). At (961 M.) *Attica* we cross the *Wabash* and at (978 M.) *State Line* we enter *Illinois* (p. 357). 1060 M. *Decatur* (p. 401); 1120 M. *Litchfield* (p. 409); 1169 M. *East St. Louis* (p. 409).

1172 M. **St. Louis**, see below.

d. Viâ Washington and Cincinnati.

1120 M. Baltimore & Ohio R. R. in 32-38 hrs. (fare $ 21.25; sleeper $ 6).

From New York to (780 M.) *Cincinnati*, see R. 60 d. Beyond Cincinnati the train *(Baltimore & Ohio South-Western Railway)* follows the N. (right) bank of the *Ohio* for some distance, crossing the *Great Miami* and entering *Indiana* (p. 357) beyond (795 M.) *North Bend.* At (806 M.) *Aurora* (490 ft.) it leaves the river. — 852 M. *North Vernon* (725 ft.) is the junction of a branch-line to (58 M.) *Louisville* (p. 568). From (906 M.) *Mitchell* a branch-line runs to (23 M.) **French Lick Springs** (*French Lick* $ 3-5; *West Baden*, 1 M. from French Lick, $ 2½-5), with waters effective in abdominal disorders. At (927 M.) *Shoals* we cross the S. fork, and beyond (950 M.) *Washington* the N. fork of the *White River.* 968 M. *Vincennes*, a city with 10,249 inhab., on the E. bank of the *Wabash* (steamers to Terre Haute, see p. 409). We here cross the Wabash and enter *Illinois* (p. 357). 1055 M. *Odin;* 1117 M. *East St. Louis* (p. 409).

1120 M. **St. Louis**, see below.

63. St. Louis.

Arrival. The *Union Station* (Pl. F, 2; restaurant), erected in 1895 at a cost of $ 5,000,000, is in Market St., between 18th and 20th Sts. The train-shed is 700 ft. long and 600 ft. wide, containing 32 tracks. The main waiting-hall, with its fine waggon-vault, is very elaborately decorated (best viewed from the galleries). Hacks (p. 411) and hotel-omnibuses (50 c.) are in waiting. — There are also smaller stations for suburban traffic at the foot of Washington Ave. and at the end of the St. Louis or Eads Bridge (Pl. H, 2). — The *Steamboat Landings* (Pl. H, 2) are near the Eads Bridge.

Hotels. *Jefferson (Pl. k; G, 2), with 1500 beds, cor. of 12th and Locust Sts., R. from $ 2½; *Southern (Pl. a; H, 2), a huge caravanserai bounded by Walnut, Elm, 4th Sts., and Broadway, $ 3-4½, R. from $ 1½; *Planters (Pl. b; H, 2), 4th St., between Chestnut and Pine Sts., R. from $ 2; Washington (Pl. m; C, 1), Kingshighway, cor. of Washington Boul., R. from $ 1½; Buckingham (Pl. c; C, 1), Kingshighway, cor. of W. Pine Boul., R. from $ 2, two good family hotels; Buckingham Annex (Pl. n; C, 1), opposite the last, R. from $ 1½; Hamilton, cor. of Hamilton and Maple Aves. (beyond Pl. A, 1), R. from $ 1½; Usona (Pl. o; C, 1), Kingshighway, from $ 3; Berlin (Pl. q; C, 1), Taylor and Berlin Aves., R. from $ 2, two good family hotels (these six all near Forest Park and some way from the centre of the city). Terminal (Pl. s; F, 2), at the Union Station, R. from $ 1½; Grand Central (Pl. g; F, 2), cor. of Jefferson Ave. and Pine St., R. from $ 1; Marquette (Pl. f; G, 2), a large new hotel,

Wagner & Debes' Geogl. Estabt. Leipzig

cor. 18th St. and Washington Ave., R. from $1; Laclede (Pl. e; H, 2), Chestnut and 6th Sts., R. from $1; Moser (Pl. t; G, 2), 815 Pine St., R. from $1; Stratford (Pl. i; G, 2), cor. 8th and Pine Sts., R. from $1, good; Maryland (Pl. p; G, 2), cor. of 9th and Pine Sts., R. from $1; Hotel Beebs (Pl. d; E, 1, 2), pleasantly situated in Olive St., cor. of Grand Ave., from $3, R. from $1; Grand Avenue (Pl. l; E, 2), nearly opposite the last, a family hotel, from $3; Benton (Pl. u; G, 2), 819 Pine St., R. $1½-2½ (men only); New St. James (Pl. v; H, 2), Broadway, cor. of Walnut St., $2-3½, R. from $1; Merchants (Pl. w; G, 2), 12th and Olive Sts., R. from $1; Hôtel Garni, Jefferson Ave. (Pl. F, 2), R. from $1; West End (Pl. h; D, 1), Vandeventer Ave., from $3, R. from $1½; Hôtel Rosier (Pl. y; G, 2), cor. of 13th and Olive Sts., R. from $1.

Restaurants. *Faust's*, cor. Elm St. and Broadway; restaurants at the **Southern* and most of the other hotels; *McTague*, Pine & 9th Sts.; *Lippe*, Olive & 8th Sts., all these first-class and frequented by ladies; *Caesar*, 210 N. 6th St.; *American Café*, Olive & 6th Sts.; *San Antonio*, Market & 7th Sts.; *Speck's Vienna Café*, 414 Market St.; *White*, 313 Pine St. and 918 Olive St.; *Locust Inn*, Locust & 7th Sts.; *Nagel's*, St. Charles & 6th Sts., for men. — Luncheon Rooms of the *Delicatessen Co.*, 124 & 718 Olive St., 116 N. 4th St., 716 N. Broadway, & 1902 Locust St.; of the *Stilwell Catering Co.*, 921, 1013, 1214, & 2621 Olive St., 219 Locust St., & 517 Chestnut St.; *Victoria*, Locust & 8th Sts.; *Pierce*, Pine & 4th Sts.; *Compton's*, 220 N. 7th St.; *Schroeder's*, 210 N. 7th St.; *Childs'*, St. Charles & 7th Sts.; *Broadway Café*, 203 N. Broadway; restaurants at the large *Dry Goods Stores*.

Tramways (electric) traverse the city in all directions and extend to many suburban points (fare within the city-limits 5 c., beyond, 5 c. more). In running E. and W. it is easy for the passenger to recognize his whereabouts by the numbers on the houses; thus, 916 Olive St. must be between 9th and 10th Sts. The St. Louis tram-cars are excellent, and some of them can be used either closed or open. — **Carriages.** With one horse, for 1 M. 25 c. for each pers., each addit. mile 25 c. for 1-2 pers.; per hr. (1-2 pers.) 75 c., outside the 3 M. radius $1. With two horses, 50 c. each for 1st mile, 25 c. each for each addit. mile, per hr. $1½, each addit. hr. $1. Each package carried outside 10 c. Waiting (one stop of 5 min. free) 10 c. per 10 min., 75 c. per hour. — **Ferries** to *East St. Louis* from foot of Market St., Carr St., and Spruce St. — **Steamers** ply to points on the Mississippi, Missouri, Ohio, Illinois, Tennessee, etc.

Theatres. *Olympic* (Pl. H, 2), Broadway; *Century* (Pl. G, 2), Olive St.; *Gayety* (Pl. G, 2), Locust St., cor. of 14th St.; *Havlin's* (Pl. G, H, 2), *Standard* (Pl. G, H, 2), Walnut St.; *Imperial* (Pl. G, 2), cor. of Pine and 10th Sts.; *Columbia* (Pl. H, 2), cor. of St. Charles and 6th Sts.; *Grand Opera* (Pl. H, 2), Market St. (continuous vaudeville performances); *American Theatre* (Pl. G, H, 2), cor. Market and 7th Sts. (high class vaudeville); *Garrick*, 511 Chestnut St. — The *Odeon* (Pl. E, 1), Grand Ave., is a large and fine hall used for concerts, dramatic performances, etc. (German performances twice weekly). — A large *Coliseum*, for exhibitions, concerts, and conventions, is to be erected at the corner of Washington and Jefferson Aves. (Pl. F, 2). — The following are Summer Theatres: *The Suburban*, at the terminus of the St. Louis & Suburban Railway, Forest Park Highlands (Pl. B, 2, 3); *Koerner's Gardens*, 4900 Arsenal St.; *Delmar Garden*, Delmar Boul. (Pl. A, B, 1); *West End Heights*, near the S.W. corner of Forest Park. — Theatre-tickets may be bought in advance at *Bellman's*, 1120 Olive St.

Clubs. *St. Louis*, 3633 Lindell Boul.; *University*, 607 N. Grand Ave.; *Union*, cor. of Jefferson & Lafayette Aves.; *Columbian*, 3919 Lindell Ave., Hebrew; *Noonday*, 319 N. 4th St.; *Mercantile*, Locust & 7th Sts., these two 'down town' lunching clubs; *Liederkranz*, Grand and Magnolia Aves., German; *Women's Club*, next door to the University Club; *Wednesday Club* (for women), cor. Taylor and Washington Aves.; *Missouri Athletic Club*, cor. of 4th St. & Washington Ave., with fine baths and gymnasium; *Racquet Club*, King's highway, near McPherson Ave., for indoor sports. — Among the chief **Country Clubs** near St Louis are the *St. Louis Country Club*, at Clayton, 8 M. to the W. of the city; the *Field Club*, with golf links, at Bissell,

to the N. of St. Louis; *Normandie Park; Glen Echo; Florissant Valley; Algonquin;* and the *Meramec Canoe Club.*

Newspapers. *Globe-Democrat* (Repub.), a widely known sheet; *Republic* (Dem.); *Post-Despatch* (Independent Dem.; evening); *St. Louis Star and Chronicle* (Independent; ev'g.); *Westliche Post* (Independent; German; m'g.); *Times* (Independent; ev'g.).

Post Office (Pl. G, 2), Olive St., open 7-11 (Sun. 9-12).

Consuls. British, *Mr. Thomas Erskine*, 620 Chemical Building; German, *Herr Max von Loehr*, 4th and Olive Sts. — *Business Men's League* (sec., W. F. Saunders), 704 Locust St. (information willingly given to strangers).

St. Louis (4-500 ft. above the sea), the largest city of Missouri and the fourth of the United States, lies on the W. bank of the *Mississippi*, about 20 M. below the mouth of the *Missouri*. It has a frontage of nearly 20 M. on the river and rises from it in three terraces, the third of which is about 200 ft. above the river-level. The city is regularly laid out, on the Philadelphia plan, Market St., running E. and W., being the dividing line between N. and S. The streets running N. and S. are numbered, though many of them are also known by names. *Broadway* or *Fifth Street* is the chief shopping thoroughfare, while other important business streets are *Fourth St.* (banks), *Olive St.* (retail trade), *Washington Ave.* (retail and wholesale trade), *Third St.* (printing-offices), and *1st* (or *Main)* and *2nd Streets* (along the river; commission houses). The city is also divided into a N. and a S. section by the valley of *Mill Creek* (now filled in), which is spanned by seven bridges. The city has recently extended greatly to the W., and commerce is steadily encroaching on the residential quarters. The population of St. Louis in 1900 was 575,238, including about 100,000 Germans and 35,000 negroes (now prob. 750,000).

History. The fur-trading station of *St. Louis* or *Pain Court* was established by the French in 1756, and it still bears traces of its French origin in the names of some of its streets and leading families. Louis XV. had just ceded the territory to the E. of the Mississippi to England, while at the same time he had made a secret treaty, transferring the W. bank to Spain. It was not till 1770, however, that Spanish authority was established at St. Louis. In 1804 St. Louis, the population of which was still below 1000, passed to the United States, with the rest of the territory then known as Louisiana. This was the signal for immigration from the States' and the English-speaking inhabitants soon outnumbered the French. St. Louis was incorporated in 1809 and by 1831 had 6000 inhabitants. In 1840 the population had swollen to 16,469, in 1859 to 185,000, in 1880 to 350,522, and in 1890 to 451,770. On May 27th, 1896, St. Louis was visited by a terrific tornado, which destroyed 300 lives and property to the value of $ 10,000,000. The floods of 1903 raised the river 38 ft., broke the levee, and did great damage in E. St. Louis (p. 409). In 1904 St. Louis was the scene of the *Louisiana Purchase Exposition*, held to commemorate the centenary of the purchase of Louisiana from France (see above). — During the so-called Fall Festivities one night is devoted to the *Procession of the Veiled Prophet*, in the style of the Mardi Gras at New Orleans (p. 633). The ball in honour of the Veiled Prophet, held in the Merchants' Exchange (p. 413), is the society event of the year.

Trade and Industry. St. Louis' position in the centre of the great Mississippi Valley gives it an immense trade, among the staples of which are bread-stuffs, packed meats, tobacco, livestock, timber, grain, wool, furs, etc. In manufactures St. Louis ranks fourth among American cities,

producing goods in 1906 valued at $281,676,596 (56,335,319 *l.*) and employing 106,548 hands. It is the chief tobacco-making city in the world (80 million pounds annually), and also produces immense quantities of beer (3,500,000 barrels annually; comp. below), flour, boots and shoes (22,000,000 pairs in 1907), hardware, stoves, railway and tramway cars, wooden wares, bricks, chemicals, drugs, biscuits ('crackers'), etc. The *Anheuser-Busch Brewery* (Pl. G, 4), cor. of 9th and Pestalozzi Sts., employs 6000 men and produces 1,800,000 barrels of beer annually. Strangers may also be interested by visits to the *Horse & Mule Market* (E. St. Louis; one of the greatest mule markets in the world; comp. p. 568); to the *Simmons Hardware Co.* (warehouse at Cupples Station); and to the *Cupples Wooden Ware Co.* The last-named is also at *Cupples Station* (Pl. G, 2), a large goods-station at the corner of Spruce & 7th Sts., surrounded by a group of huge buildings constructed to facilitate direct shipment from the warehouses to the trains. Cupples Station now belongs to Washington University. The *Meyer Brothers Drug Co.* (4th St. & Clark Ave.; drugs and perfumes) is also interesting.

Eugene Field (1850-95), the poet and journalist, was born in St. Louis, probably in a house at the corner of 4th & Cerre St. (Pl. H, 3).

The **Court House** (Pl. H, 2), in Broadway, between Market and Chestnut Sts., is a substantial building in the form of a Greek cross. It is surmounted by a dome (175 ft. high), the gallery of which commands an excellent view of the city and river (open till 4 p.m.). The building contains some frescoes by *Wimar* (see p. 415). A little to the E., in 3rd St., cor. of Chestnut St., is the **Merchants' Exchange** (Pl. H, 2), the main hall of which, with a painted ceiling, is 220 ft. long (business-hours 10-1.15 p.m.; gallery open to visitors). The grand ball of the Veiled Prophet (p. 412) is held here. — The *Cotton Exchange* (Pl. H, 2) is at the corner of Main and Walnut Sts.

By following Market St. to the W. from the Court House we soon reach the square named *Washington Park*, with the **City Hall** (Pl. G, 2). A little to the S., in the square enclosed by Clark Ave. and Spruce, 11th, and 12th Sts., are the so-called **Four Courts** (Pl. G, 2), built on the model of the Louvre, with a large semicircular gaol at the back. — A little to the N. of the City Hall runs the busy Olive Street (Pl. E-H, 2), which we may follow to the right (E.) to Broadway, passing the **Post Office** (Pl. G, 2) on the left. Among the numerous substantial business-buildings in this part of Olive St. are the *Star* (N.W. cor. of 12th St.), *Century* (9th St.; N.W. cor.), *Frisco* (9th St.; S.W.), *Chemical* (8th St.; N.E.), *Missouri Trust* (7th St.; N.W.; view from the roof, adm. 25 c.), *Commercial* (6th St.; S.E.), *Laclede* (4th St.; S.W.), *Commonwealth Trust* (Broadway; N.E.), *National Bank of Commerce* (Broadway; S.E.), and *Third National Bank*, a large and very fine structure. In Broadway (Pl. G, H, 1-4), at the corner of Locust St., is the *Mercantile Library* (Pl. H, 2), which contains 150,000 vols., statues by Miss Hosmer, etc.

Other important buildings in this business-section of the city are the *Security Building* (at the S.W. cor. of 4th & Locust Sts.); the *Mercantile Trust Co.*, by Isaac Taylor, at the N.E. cor. of 8th & Locust Sts. (with vaults closed by a circular steel door of marvellous mechanism weighing 4½ tons); the **St. Louis Union Trust Co.*, by J. L. Mauran, at the N.W. corner of 4th & Locust Sts.; the *Mercantile*

Club (Pl. H, 2), S.E. corner of 7th & Locust Sts.; the *Public Library* (Pl. G, 2; 225,000 vols.; comp. below), Locust St., corner of 9th St.; the *Lincoln Trust* and *Wainwright Buildings*, corner of 7th & Chestnut Sts.; and the *Missouri Pacific Building*, N.W. corner of Market & 7th Sts.

On the block between 13th, 14th, Olive, and St. Charles Sts. is to be erected the new *Carnegie Central Library* (Pl. G, 2). Mr. Andrew Carnegie gave $1,000,000 towards the cost of this structure and that of several branch-libraries, ten of which have already been built.

At the corner of Locust and 19th Sts. is the handsome *School of Fine Arts* (Pl. F, G, 2), which is connected with Washington University (p. 415).

The **Parks** of St. Louis are among the finest in the United States, and their area (2300 acres) is exceeded by those of Philadelphia alone. All those named below are easily reached by tramway.

Forest Park (Pl. A, B, 1, 2), on the W. side of the city, 4½ M. from the Court House, is the largest park in St. Louis (1370 acres). It has fine trees and drives, but a great many of the former were cut down for the Louisiana Exposition (1904), which occupied half the area of the park. The muddy *Des Pères River* meanders through Forest Park, and it also contains several lakes. At the Clayton Ave. entrance (Pl. C, 2) is a statue of *Senator Blair*. — Among the streets leading to, and adjoining, Forest Park are several of the so-called **'Places'**, which rank among the finest residential streets in the world. These consist of wide avenues, generally enclosed by ornamental gateways at each end, and containing tasteful and well-to-do-looking houses (often in an Italian style), each standing in its own grounds. *Westmoreland Place*, *Portland Place* (Pl. B, 1), and *Vandeventer Place* (Pl. D, E, 1) are characteristic specimens. — ***Tower Grove Park** (Pl. C, D, 4), a long narrow oblong (266 acres) in the S.W. part of the city, is beautifully laid out and contains three fine bronze statues (Columbus, *Humboldt, and Shakspeare), by Ferd. von Miller of Munich. Tower Grove Park is adjoined by **Shaw's** or the **Missouri Botanical Garden** (Pl. C, 3, 4), the finest garden of the kind in the United Staates, which was bequeathed to the city by *Mr. Henry Shaw* (b. at Sheffield, Eng., in 1800; d. 1889), the founder of the botanical school in Washington University and also the donor of Tower Grove Park (see above). The garden (75 acres in extent), which is open to the public on weekdays, is excellently equipped for the purposes of the student and is also a delightful resort for the layman. At one end of the garden is *Mr. Shaw's House*, near which is a mausoleum containing his remains. — A little to the E. is *Reservoir Park* (Pl. E, 3), Compton Heights. — The small **Lafayette Park** (Pl. F, 3) suffered greatly from the tornado (p. 412). It contains a bronze replica of Houdon's *Washington* (p. 556) and a statue of *Senator Benton*. — Other parks are *Carondelet Park* (183 acres), in the S. (comp. Pl. E, 4), and *O'Fallon Park* (158 acres) in the N. part of the city (comp. Pl. D, 1).

Adjoining the latter on the N.W. are the *Bellefontaine Cemetery* (350 acres) and *Calvary Cemetery* (415 acres).

The **Fair Grounds** (comp. Pl. E, 1), 140 acres in extent, contain an amphitheatre, a racecourse, etc.

To the W. of Forest Park, beyond Pl. A, 1, is the new home of ***Washington University,** forming one of the most successful and appropriate groups of collegiate buildings in the New World. They were designed by *Messrs. Cope & Stewardson* in a Tudor-Gothic style and enclose several quadrangles. The material is red Missouri granite.

Among the buildings already completed are *University Hall*, the *Chemical* and *Physical Laboratories*, the *Architectural* and *Engineering Buildings*, the *Chapel* (resembling King's College Chapel at Cambridge, England), the *Library* (with a fine reading-room), various *Dormitories*, and the *Gymnasium* (at the extreme W. end of the university grounds, 110 acres in extent). Among the chief donors, whose generosity made possible this expansion of the university, are Mr. Samuel Cupples, Mr. Robt. S. Brookings, Mr. Adolphus Busch, Mrs. J. E. Liggett, Mrs. Wm. McMillan, and Mrs. Benjamin B. Graham. — One of the buildings of the *Medical Department* stands in Locust St. (Pl. F, G, 2); the other buildings, including the fine *University Hospital*, are in Jefferson Ave., just N. of Washington Ave. (Pl. F, 2). The *Dental Department* is at the corner of Beaumont (27th) and Locust Sts. (Pl. F, 2).

This university is notable for the width of its charter, which includes an ordinary undergraduate department, schools of engineering, fine arts, law, medicine, dentistry, and botany, a manual training-school, and schools for boys and girls. It is attended by about 2000 University students and 1000 others.

In Forest Park, not far from the University, is the handsome **Museum of Fine Arts** (Pl. A, 2; open daily from 8 to sunset, on Sun. & holidays from 1; adm. 25 c.; free on Frid., Sat., Sun., & holidays), originally erected as the Fine Arts Building of the Louisiana Purchase Exposition (p. 412). In front of the entrance is a colossal equestrian bronze statue of St. Louis, by *Ch. H. Niehaus.*

The contents include large collections of *Casts* (incl. the Ægina Marbles) and *Electrotype Reproductions* and well-chosen selections of *Lace*, *Glass*, *Pottery*, *Mosaics*, *Ivory Carvings*, *Wood* and *Metal Work*, etc. It also contains a good collection of modern American sculptures, besides American paintings, among which are several by *Carl Wimar* (1829-63), a St. Louis artist who painted characteristic Western scenes from nature. A collection of comparative architecture is planned.

The great ***St. Louis or Eads Bridge** (Pl. H, 2), across the Mississippi, is deservedly one of the lions of the city. The visitor may cross it on foot (toll 5 c.) for the sake of the views up and down stream, and return by ferry (5 c.) for the view of the majestic arches of the bridge itself; but part of this walk is not very pleasant.

The bridge, which was designed by *Capt. James B. Eads* (p. 432), was constructed in 1869-74 at a cost of $10,000,000 (2,000,000*l.*). It consists of three steel spans (centre 520 ft., others 502 ft. each) resting on massive limestone piers. The total length is 2070 yds. The bridge is built in two stories, the lower for the railway, the upper for the roadway and foot-passengers. Trains enter the lower track by a *Tunnel*, 1630 yds. long, beginning near the corner of 12th and Cerre Sts. The highest part of the arches is 55 ft. above the water.

The **Merchants' Bridge**, 3 M. farther up the river, is a steel truss bridge, and was built in 1889-90, at a cost of $ 3,000,000. It is used by railways only. It has three spans, each 500 ft. long and 70 ft. high.

[A third bridge (to be ready for use in 1909) is being built between the Eads Bridge and the Merchants' Bridge.]

The **St. Louis Water Works** are at *Chain of Rocks*, to the N. of the Merchants' Bridge, and there are water-towers (fine views) in Grand Ave. and Reservoir Park (p. 414).

Among other buildings of importance in St. Louis are the *St. Louis University* (Pl. E, 2), a Roman Catholic institution in Grand Ave., with 840 students; the college-church of *St. Xavier's* (Pl. E, 2), with a fine interior; the *Roman Catholic Cathedral* (Pl. H, 2), in Walnut St.; *Christ Church Cathedral* (Epis.; Pl. G, 2), Locust St., cor. of 13th St.; the *Church of the Redemptorists* (Pl. E, 1), Grand Ave.; the *Holy Trinity Catholic Church* (German), cor. of Mallinckrodt and 14th Sts. (beyond Pl. G, 1), a large and prominent building with two spires; the *Grand Avenue Presbyterian Church* (Pl. E, 1); the *First Presbyterian Church* (Pl. D, 1), Washington Boul., cor. of Sarah St.; the *Second Presbyterian Church*, cor. of Taylor Ave. and Westminster Place (Pl. C, 1), with fine stained-glass windows; the *Pilgrim Congregational Church*, Union Ave., cor. Kensington Ave. (Pl. B, 1); the *Church of the Messiah*, Union Ave., just N. of Delmar Boul., near the Congregational Church; *All Saints' Church* (Pl. E, 2), at the corner of Locust St. and Garrison Ave.; the *Synagogue* (Pl. D, 2), Lindell Boulevard, cor. of Vandeventer Ave.; the *Temple Israel*, Kingshighway, cor. Washington Boul. (Pl. C, 1); *St. John's*, the *Christian Science Church*, and the *Second Baptist Church* (a striking example of Italian Gothic), all three in Kingshighway, near the Temple Israel; the *University Club*, at the N.W. corner of Grand and Washington Avenues (Pl. E, 1); the *St. Louis Club*, Lindell Boulevard, just to the W. of Grand Ave. (Pl. D, 2); the *City Insane Asylum* (comp. Pl. B, 4); and the *U. S. Arsenal*.

Among the favourite pleasure-resorts near St. Louis are *Montesano* (reached by boat and railway); *Jefferson Barracks*, 12 M. to the S., a military post, reached by boat, railway, and tramway; *Crystal City* (see p. 430); *Crève Coeur Lake*, 20 M. to the N.W., reached by Delmar tram-car (fare 15 c.); *Piasa Bluffs* (boat and rail); and *Meramec Highlands* (Highlands Inn, good), reached by rail and tramway (car on Market St.; fare 10 c.). Near the last is *Brownhurst*, the estate of Mr. D. S. Brown, containing a splendid collection of orchids (shown to visitors).

From St. Louis to Cairo, 150 M., *Illinois Central Railway* in 5-6 hrs. — *Cairo*, see p. 588.

From St. Louis to *New Orleans* by railway, see R. 93; to *St. Paul*, see R. 69; to *Chicago*, see R. 58; to *New York*, see R. 62; to *Louisville*, see R. 64; to *Denver*, see R. 63; to *Texarkana*, see R. 94.

64. From St. Louis to Louisville.

274 M. Southern Railway in 9¼-10 hrs. (fare $8; sleeper $2½).

St. Louis, see p. 410. The train crosses the *Eads Bridge* (p. 415) and runs nearly due E. through *Illinois*. 18 M. *Belleville*; 65 M. *Centralia* (500 ft.; 6721 inhab.), the junction of several railways; 87 M. *Mt. Vernon* (405 ft.; Rail. Restaurant); 151 M.

Mt. Carmel. We now enter *Indiana.* From (162 M.) *Princeton* and (175 M.) *Oakland* railways run to *Evansville* (see below). — 199 M *Huntingburg* (495 ft.; Rail. Restaurant; 2527 inhab.) is the junction of branch-lines to (47 M.) *Evansville*, etc.

Evansville (380 ft.; *St. George*, from $ 3; *Acme*), a busy city of Indiana, with 59,000 inhab., lies on the *Ohio* and carries on an extensive trade in coal, timber, grain, pork, flour, and tobacco. — About 21 M. to the N.W. of Evansville, by the Ill. Central R. R., is *Stewartsville*, whence a branch-line runs to *New Harmony* (The Tavern, $ 2), the seat of Robert Dale Owen's famous Socialistic Colony.

From (240 M.) *Milltown* we may visit (8½ M.) the *Wyandotte Cave* (see below).

The *Wyandotte Cave, second in size to the Mammoth Cave (p. 585) only, is its superior in the number and beauty of its stalactites and stalagmites. There is a small *Hotel* ($ 1½) at the mouth of the cave, and three regular routes are laid out through the latter, one 10-12 M. long (fee $ 1; all three routes $ 2). The cave may also be reached from (11 M.) *Corydon* (see below) or from (5 M.) *Leavenworth*, on the Ohio.

From (250 M.) *Corydon Junction* a short line runs to *Corydon* (see above). 267 M. *New Albany* (20,628 inhab.). — The train now threads a tunnel, crosses a long bridge over the *Ohio*, and reaches (274 M.) **Louisville**, see p. 568.

65. From Chicago to Council Bluffs and Omaha.

a. Viâ Chicago, Milwaukee, and St. Paul Railway.

492 M. Railway in 14-14½ hrs. (fare $ 10; sleeper $ 2.50). — This forms part of the *Western Midland Route* to California (through-cars from Chicago to San Francisco and Los Angeles).

Chicago (Canal St. Union Depot), see p. 366. The line runs towards the W. through a farming district. 37 M. *Elgin* (700 ft.; Fosgate, $ 2-2½), a busy city of 22,433 inhab. on the *Fox River*, with large watch and other factories. From (80 M.) *Davis Junction* a line runs to the N. to (13 M.) *Rockford* (p. 386). — 138 M. **Savanna** (570 ft.; *Radke Ho.; Depot*, $ 2), on the E. bank of the *Mississippi*, is the junction of lines running N. to *Dubuque* (p. 386) and S. to *Rock Island* (p. 420). Our line here crosses the river to (141 M.) *Sabula* and enters *Iowa* (p. 420). 174 M. *Delmar Junction* (810 ft.); 193 M. *Oxford Junction* (720 ft.); 228 M. *Marion*, the junction of a line to Cedar Rapids (p. 419) and Kansas City (p. 423) and connected by trolley line with Cedar Rapids (p. 419); 282 M. *Tama City.* From (348 M.) *Madrid* and from (378 M.) *Herndon* lines run to Des Moines (p. 420), while another line runs to the N. from Herndon to the *Okoboji Lakes* (E. & W.) and (125 M.) *Spirit Lake*, frequented summer-resorts. 395 M. *Coon Rapids;* 427 M. *Manilla*, junction of a line to Sioux City (p. 398); 468 M. *Neola.*

488 M. **Council Bluffs** (980 ft.; *Grand Hotel*, R. from $ 1), a flourishing city of (1905) 25,231 inhab., at the foot of the bluffs

of the *Missouri*, 2½ M. to the E. of the river, owes its prosperity mainly to the fact that it is the principal E. terminus of the great Union Pacific Railway (see R. 73) and the converging point of the E. railways connecting with it. *Fairmount Park* is prettily laid out and commands fine views. Council Bluffs is connected with Omaha by two railway-bridges and a road-bridge.

The use of 'Boy Policemen' as a supplement to the regular force is an interesting experiment in Council Bluffs.

Our train now runs into the (489½ M.) *Union Pacific Transfer Station* and then crosses the Missouri by a substantial *Iron Bridge*, more than ½ M. long, erected at a cost of $1,000,000.

492 M. **Omaha** (1030 ft.; *Loyal*, R. $1-5; *Paxton Ho.*, from $2½, R. from $1; *Rome*, R. from $1; *Henshaw*, R. from $1½; *Millard*, from $2½, R. from $1; *Murray*, *Merchants'*, $2-3½; *Drexel*, $2-2½), the largest city in *Nebraska* ('Antelope State') and on the Missouri, with (1900) 102,555 inhab. (now, probably, 175,000), s situated on a plateau sloping up from the W. bank of the river. The manufacturing and jobbing district adjoins the river, while the pleasant residence-quarters occupy the high ground. Among the more important buildings are the *Federal Building*, the *Auditorium* (a huge convention hall), the *New High School*, the *Burlington Railway Station*, the *County Court House*, the *City Hall*, the *Omaha Club*, the *Board of Trade*, the *Post Office*, several *Churches*, the *Y. M. C. A.*, the *Y. W. C. A.*, the *Brandeis Building* (with its subway arcades), and the offices of the *Omaha Bee* and the *New York Life Insurance Co.* (view from tower).— The *Public Library & Museum* contains 100,000 vols. and the Byron Reed collection of coins. — The **Art Collection of Mr. George W. Lininger*, cor. of 18th and Davenport Sts. (reached by Dodge St. cars to 18th St.; open on Thurs. & Sun., to strangers at other times also), includes paintings by Guido Reni, Del Sarto, Bouguereau, Detaille, Meissonier, Schreyer, Lefebvre, and many other modern masters. — *Hanscom Park* is a small but picturesque natural park. — 'Seeing Omaha' electric cars and automobiles afford a convenient way of visiting the sights.

Omaha (the 'Gate City') owes its commercial importance to its position as one of the chief gateways to the West and has grown rapidly since its foundation in 1854. Among the chief articles of its trade are grain, butter, wool, and agricultural implements. Its industries include smelting (American Smelting & Refining Co.), brewing, distilling, meat-packing (excelled only by Chicago and Kansas City), machine-shops, and the making of bricks, gasolene motor-cars for railroad use, and steam-engines The total value of their products in 1907 (including S. Omaha) was $220,000,000. It is a railway-centre of great importance, being practically the E. terminus of the Union Pacific Railway and in more or less direct communication with all the chief cities of the E. and S. — The festival of *Ak-Sar-Ben*, celebrated in autumn, resembles the Mardi Gras of New Orleans (p. 633). At (4 M.) *South Omaha* (26,000 inhab.) are the mmense stockyards and packing houses.

Fort Omaha, just to the N. of the city, is the chief signal service, balloon, and 'wireless' experimental station of the U. S. army. Omaha is also the headquarters of the military department of the Missouri. — *Fort*

Crook lies 6 M. to the S. (electric cars). — There are good golf links at the *Country Club*, the *Field Club*, and the *Happy Hollow Club*.

From Omaha to *Portland*, see R. 74; to *Denver*, see R. 66.

b. Viâ Chicago and North-Western Railway.

492 M. Railway in 13-16 hrs. (fares as at p. 417). — Through-cars run to California by this line also.

Chicago (Wells St. Station), see p. 366. This line follows nearly the same general direction as that just described. 25 M. *Wheaton*, with Wheaton College (340 students) and the links of the Chicago Golf Club; 58 M. *Dekalb*, with the State Normal School (r.). Beyond (98 M.) *Dixon* (720 ft.) we follow the *Rock River* to (110 M.) *Sterling*, a small manufacturing city (6309 inhab.). — From (136 M.) *Fulton Junction*, on the E. bank of the *Mississippi*, lines run N. to *Savanna* (p. 417) and *Dubuque* (p. 386) and S. to *Rock Island* (p. 420). We cross the river by a fine *Iron Bridge*, $^3/_4$ M. long, enter *Iowa*, and reach (138 M.) **Clinton** (725 ft.; *Lafayette Inn*, $ 2$^1/_2$-3$^1/_2$; *Revere Ho.*, $ 2), a prosperous city with (1905) 22,756 inhab. and extensive lumber-mills. — 173 M. *Wheatland*. — 219 M. **Cedar Rapids** (745 ft.; *Grand*, $ 2; *Delavan*, R. from 75 c.), a city of (1905) 28,759 inhab., on *Red Cedar River*, is an important railway-centre (comp. pp. 387, 417), carries on an extensive trade, and contains large pork-packing establishments and several manufactories.

At *Amana*, 20 M. to the S.W. of Cedar Rapids, is situated the largest and most prosperous Communistic settlement in the country, consisting of 1800 Germans, styling themselves 'Inspirationists'. They have saw and grist mills, produce woollen and cotton fabrics, cultivate 25,000 acres of land, and keep flocks and herds. All their profits are shared. In their four churches under one roof are held quaint religious services.

254 M. *Belle Plaine;* 270 M. *Tama*. 326 M. *Ames*, with the Iowa Agricultural College (1330 students), is the junction of a line to (37 M.) *Des Moines* (p. 420). Beyond (340 M.) *Boone* (1155 ft.) we descend rapidly into the valley of the *Des Moines River*, and the scenery becomes more interesting. We cross the river near (345 M.) *Moingona*. Farther on we again traverse a rich prairie district. 363 M. *Grand Junction*. At (400 M.) *Maple River Junction* we bend to the left (S.). 406 M. *Arcadia* (1440 ft.; 870 above Lake Michigan) is said to be the highest point in the level state of Iowa. Beyond (423 M.) *Denison* we pass through the pretty *Boyer Valley*. Beyond (467 M.) *Missouri Valley* (1020 ft.), the junction of a line from *Sioux City* (p. 398), we have good views of the *Missouri* and its bluffs.

488 M. *Council Bluffs*, and thence to —

492 M. **Omaha**, see R. 65 a.

c. Viâ Chicago, Rock Island, and Pacific Railway.

503 M. Railway in 14-20 hrs. (fares as at p. 417). — This line also forms part of a regular through-service to San Francisco and Los Angeles.

Chicago (Van Buren St. Station), see p. 366. The train runs at first to the W.S.W. through a great prairie region. — 40 M. Joliet

(540 ft.; *Munroe, St. Nicholas*, $ 2), an agricultural and industrial centre with 29,353 inhab., on the *Des Plaines River*, is the terminus of the *Illinois and Michigan Canal* and the seat of the *Illinois State Penitentiary*. In front of the *Public Library* is a statue of *Louis Joliet* (1645-1700), the French explorer, by S. Asbjornsen. The immense plant of the *Illinois Steel Co.* covers 186 acres and is the centre of probably the most extensive manufacture of barbed wire in the world. In the vicinity are large limestone quarries, employing 3000 men. — 84 M. *Ottawa* (10,600 inhab.); 99 M. *La Salle* (10,450 inhab.); 159 M. *Geneseo;* 179 M. *Moline*.

181 M. **Rock Island** (470 ft.; *Harper Ho.*, $ 2½-4; *Rock Island Ho.*, R. from 75 c.), an important railway-centre and industrial town of 19,493 inhab., on the E. bank of the *Mississippi*. It lies at the foot of the *Moline Rapids*, which afford good water-power. The island in the river from which it takes its name, 970 acres in area, is occupied by a large *United States Arsenal*.

From Rock Island the train crosses the Mississippi, by a fine bridge, enters *Iowa* (the 'Hawkeye State'), and reaches (183 M.) **Davenport** (580 ft.; *Kimball Ho.*, *St. James*, $ 2-3½), the third city of Iowa, with (1905) 39,797 inhab., an important trade in grain and coal, and numerous manufactories. It is well situated on the slopes of a bluff rising from the river. It is also the junction of a line to *Kansas City* (p. 423). — At (222 M.) *West Liberty* (665 ft.) we intersect the railway from Burlington to Minneapolis (p. 390). — 237 M. **Iowa City** (670 ft.; *Burkley Imperial*, $ 2-3; *St. James*, $ 2), a busy city of (1905) 8497 inhab., on the *Iowa River*, is the seat of the *State University* and the *State Historical Library* (15,000 vols.). — 303 M. *Grinnell;* 335 M. *Colfax* (750 ft.), with mineral springs.

358 M. **Des Moines** (800 ft.; *Savery*, R. $ 1-5; *Kirkwood*, R. from 75 c.; *Victoria*, R. $ ¾-2), the capital of Iowa, is a city of (1905) 75,626 inhab., situated at the confluence of the *Des Moines* and *Raccoon Rivers*, at the head of navigation of the former. It is an important railway-centre and carries on a considerable trade and several manufactures (value of products in 1900, $ 10,488,000). Among the chief buildings are the *State Capitol* (erected at a cost of $ 3,000,000; rebuilt after a fire in 1904), the *Post Office*, the *City Hall*, the *Grand Opera House*, *Drake University* (1760 students), and the *State Library* (50,000 vols.). The name of city and river seems, in spite of appearances, to be of Indian origin.

The train continues to run towards the W. Beyond (479 M.) *Neola* we descend to the level of the *Missouri*.

499 M. *Council Bluffs*, and thence to —

503 M. **Omaha**, see R. 65 a.

d. Viâ Chicago, Burlington, and Quincy Railroad.

500 M. Railway in 14-17 hrs. (fares as at p. 417).

Chicago (Canal St. Union Depot), see p. 366. The line runs at first towards the S.W., through a rich farming district similar to those mentioned at p. 420.

37 M. *Aurora* (p. 386); 83 M. *Mendota* (750 ft.); 163 M. *Galesburg* (790 ft.; Union, $2-3; Arlington, R. from 50 c.; Rail. Restaurant), an important railway-centre, with 18,607 inhab., two flourishing colleges, various industries, and a trade in agricultural produce. — From (205 M.) *Carthage Junction* the train crosses the *Mississippi* to —

206 M. **Burlington** (525 ft.; *Delano*, $2-3; *Union*, $2), the seventh city of Iowa, with (1905) 25,318 inhab. and a considerable trade by river and railway. The city is regularly laid out, with the business-quarters on the river-bottom and the residence-quarters on the bluffs above. The *Burlington Institute*, the *Free Public Library* (35,000 vols.), and the *County Court House* are among the chief buildings. — The line now ascends towards the W. 233 M. *Mt. Pleasant* (725 ft.), with two Methodist colleges and a large Insane Asylum; 280 M. *Ottumwa* (630 ft.), on the *Des Moines*, with (1905) 20,181 inhab. and considerable trade and industry; 304 M. *Albia* (945 ft.), the junction of a line to (68 M.) *Des Moines* (p. 420); 360 M. *Osceola* (1125 ft.). Beyond (393 M.) *Creston* (1250 ft.) the line descends towards the Missouri Bottom. 444 M. *Red Oak* (1030 ft.), the junction of a line to (52 M.) *Nebraska City;* 479 M. *Pacific Junction* (960 ft.).

496 M. *Council Bluffs* and thence to —

500 M. **Omaha**, see R. 65 a.

e. Viâ Illinois Central Railroad.

516 M. Railway in 14½ hrs. (fares as at p. 417).

Chicago (Illinois Central Station), see p. 366. This line, running nearly due W., passes through the N. portions of Illinois and Iowa. From (114 M.) *Freeport* branch-railways run to (66 M.) *Dodgeville* and to (62 M.) *Madison* (p. 385). Between (166 M.) *Galena* and (183 M.) *Dubuque* (see p. 386) we cross the *Mississippi.* From (230 M.) *Manchester* a branch-line runs to (42 M.) *Cedar Rapids* (p. 419); and from (276 M.) *Waterloo* another leads to (109 M.) *Albert Lea* (p. 386). At (374 M.) *Fort Dodge* (14,369 inhab. in 1905; Duncombe, $2-2½; Logan, $2), a thriving town, the railway divides, the N. portion leading to (451 M.) *Cherokee*, where it again divides for (510 M.) *Sioux City* (p. 398) and for (547 M.) *Sioux Falls* (p. 398). From Fort Dodge another branch-line runs N. to *Albert Lea* (p. 386). The main line bends to the S.W. to (512 M.) *Council Bluffs* and (516 M.) *Omaha* (p. 418).

66. From Omaha to Denver.

a. Viâ Chicago, Burlington, and Quincy Railroad.

538 M. Railway in 15 hrs. (fare $ 17; sleeper $ 3.50). Through-cars from Chicago.

Omaha, see p. 418. The line runs towards the S.W. and crosses the *Platte River*. — 31 M. *Ashland*.

55 M. Lincoln (*Lincoln*, *Lindell*, R. $ 1/2-2 1/2; *Windsor*, R. $ 1/2-1 1/2; *Capitol*, R. $ 1/2-1), the capital of *Nebraska* and second city in the state, with (1900) 40,169 inhab., is an important railway, industrial, and commercial centre. Among the chief buildings are the *Capitol*, the *State Insane Asylum*, the *Penitentiary*, the *University of Nebraska* (3130 students), and several other educational institutions.

From Lincoln to Billings, 838 M., railway *(Burlington Route)* in 29 hrs. This line is an important through-route for passengers for the Yellowstone Park and the Pacific Coast. We first traverse a farming region, passing numerous small stations. — Beyond (472 M.) *Edgemont* (4450 ft.), junction of a branch-line to Deadwood (see below), the Billings line traverses a grazing country. Not far from (584 M.) *Minturn*, on the *Belle Fourche River*, is the curious *Devil's Tower* or *Bear Lodge*, a natural obelisk of columnar basaltic rock, 1200 ft. high and tapering from a diameter of 800 ft. at the bottom to 375 ft. at the top. It is supposed to be the neck or plug of an extinct volcano, of which the crater has been removed by erosion. — 694 M. *Sheridan*. About 20 M. to the W. rise the *Bighorn Mts.*, with their curious cirques and crags, culminating in *Cloud Peak* (13,165 ft.). — From (767 M.) *Crow Agency* we may visit (2 1/2 M.) the scene of the Custer Massacre (p. 440), now a national cemetery. — From (793 M.) *Toluca* a branch-line runs to (129 M.) *Cody*, the nearest railway-station for the E. road into *Yellowstone Park* (see pp. 449, 457). At (838 M.) *Billings* we join the Northern Pacific Railway (see p. 440).

From Edgemont to Deadwood, 107 M., railway in 6 hrs. — 29 M. Hot Springs (3450 ft.; *The Evans*, $ 2 1/2-5), the water of which (98° Fahr.) is beneficial for rheumatism and cutaneous and stomachic diseases. There is a large Soldiers' Home here. — 99 M. *Englewood*, the junction of a branch-line to (31 M.) *Spearfish*, in a *Canyon rivalling those of Colorado (pp. 473, 494, etc.). — 107 M. Deadwood (4540 ft.; *Franklin*, R. $ 1-2), the chief town (4365 inhab. in 1905) in the important mining district of the *Black Hills*, in S. Dakota. A striking view is obtained from *White Rock* (just above the town) of the plains and a great butte rising from them.

103 M. *Fairmont;* 152 M. *Hastings*, with 7188 inhab.; 206 M. *Holdrege*, the junction for the line to Cheyenne (p. 460); 229 M. *Oxford*, on the *Republican*, the junction of the line from St. Louis (p. 410). At (283 M.) *McCook* the time changes to the 'Mountain' standard (p. xviii). The country is now less thickly settled. We enter *Colorado* (p. 471) at (356 M.) *Haigler*. 426 M. *Akron*. At (474 M.) *Corona* we have our first glimpse of Pike's Peak (p. 491) and the Rocky Mts. Farther on Long's Peak (p. 473) is prominent to the N. — In approaching Denver we pass the large smelting-works of *Argo* (p. 473).

538 M. Denver, see p. 471.

b. Viâ Chicago, Rock Island, and Pacific Railway.

580 M. Railway in 15-18 hrs. (fares as above). — This is part of the *Western Midland Route* to California (comp. p. 417).

Omaha, see p. 418. The route is much the same as that above

described. — 58 M. *Lincoln*, see p. 422; 116 M. *Fairbury*. At (149 M.) *Belleville* we are joined by the line from Kansas City (see below). Mountain time is reached at (244 M.) *Phillipsburg*, and *Colorado* (p. 471) is entered at (383 M.) *Goodland*. 490 M. *Limon* is the junction of the line to Colorado Springs (p. 488).

580 M. **Denver**, see p. 471.

c. Viâ Union Pacific Railroad.

572 M. Railway in 14 hrs. (fares as at p. 422).

From Omaha to (375 M.) *Julesburg*, see R. 73. Our train here diverges to the left from the main line to Ogden and Portland and follows the course of the *Platte River*. 432 M. *Sterling* (3920 ft.); 526 M. *La Salle* (4660 ft.).

572 M. **Denver**, see p. 471.

67. From Chicago to Kansas City.

a. Viâ Atchison, Topeka, and Santa Fé Railway.

458 M. Railway in 12½-14½ hrs. (fare $ 12.50; sleeper $ 2.50, tourist car $ 1.25). This line forms part of the through *Santa Fé Route* from Chicago to California (comp. p. 476).

From *Chicago* (Dearborn Station) to (41 M.) *Joliet* this line follows practically the same route as that described R. 65 c. — Beyond (54 M.) *Blodgett* we cross the *Kankakee*. — 94 M. *Streator* (14,079 inhab.). At (100 M.) *Ancona* the line forks, the left branch running to *St. Louis* (p. 410). At (134 M.) *Chillicothe* (Rail. Restaurant) we cross the *Illinois River* and the Rock Island Railway. — 182 M. *Galesburg* (p. 421). — At (229 M.) *Dallas* we reach the *Mississippi*, which we cross at (236 M.) *East Fort Madison*. — 237 M. **Fort Madison** (*Anthes, Metropolitan*, $ 2; *Rail. Restaurant*), on the W. bank of the Mississippi, in *Iowa* (p. 420), is a thriving city with (1905) 8767 inhabitants. The line bends to the S.W. and near (257 M.) *Dumas* crosses the *Des Moines River* and enters *Missouri* (p. 430). — 352 M. *Marceline* (Rail. Restaurant). From (416 M.) *Lexington Junction* a branch-line runs to *St. Joseph* (p. 425) and *Atchison* (p. 476). Our line now crosses the *Missouri*. 455 M. *Grand Avenue* (Kansas City).

458 M. **Kansas City.** — Baltimore Hotel, R. $ 1½-5; Coates, $ 2½-5, R. from $ 1; Kupper, from $ 2½, R. from $ 1; Densmore, from $ 2½, R. from $ 1; Midland, R. $ 1-3½; Savoy $ 2½-3, R. $ 1-2½; Victoria, $ 2-2½, R. from $ 1. — '*Seeing Kansas City*' *Cars* leave the cor. of 9th & Main Sts. at 1.30 p.m. (fare 50 c.).

British Vice-Consul, *Mr. E. V. Graham.*

Kansas City (780 ft.), the second city of Missouri, with (1900) 163,752 inhab., lies on the S. bank of the Missouri, just below the influx of the *Kansas River*. It had only 3500 inhab. in 1865, but is now an important industrial, commercial, and railway-centre (value

of manufactures in 1900, $ 36,527,392). Among the most prominent buildings are the *Court House*, the *City Hall*, the *Federal Building*, the *Public Library*, the *Board of Trade*, the *Convention Building* (15,000 seats), the *Willis Wood Theatre*, and the *First National Bank*. The Missouri is crossed here by three fine bridges. Among the most attractive features of the extensive system of parks and boulevards are the **Paseo*, *Swope Park*, and *Penn Valley Park*.

On the W., Kansas City, Missouri, is adjoined by **Kansas City**, Kansas (*Grund*, R. from $ 1; *Metropolitan*, $ 2), at the mouth of the *Kansas River*, the largest city in Kansas, with (1907) 80,522 inhab. and the second-largest stockyards and packing-houses (Armour, etc.) in the country (annual value of products $ 100,000,000).

From Kansas City to (507 M.) Fort Worth, (517 M.) Dallas, (785 M.) San Antonio, (834 M.) Houston, and (884 M.) Galveston, *Missouri, Kansas, and Texas Railway* in 17¾ hrs., 17½ hrs., 29 hrs., 29¼ hrs., and 31¼ hrs. This railway traverses Oklahoma and affords a direct route to points in Texas, passing through an agricultural and mining district. Its extreme N. termini are *St. Louis* (p. 410) and *Hannibal* (p. 425). Passengers from St. Louis join it at (137 M.) *Parsons*. The line forks here, one branch going through Central Oklahoma to Guthrie and Oklahoma City (see p. 476). — Beyond (160 M.) *Chetopa* we enter *Oklahoma* (see p. 476). 189 M. *Vinita*; 238 M. *Wagoner*. — 254 M. Muskogee (*Katy Hotel*, $ 2), with (1900) 4254 inhab., is the seat of the U. S. Indian Agency for the Five Tribes (p. 476), of an Indian University, and of some Indian schools. Visits may be made hence to *Tahlequah* and *Okmulgee*, two centres of Indian life. From Muskogee a branch-line runs to *Tulsa* and other points in the oil-district, connecting at (84 M.) *Osage City* (p. 427) with the line from Parsons to Oklahoma City (see above). At (316 M.) *South McAlester* (Rail. Restaurant) we cross a railway from Memphis to Oklahoma (p. 476). — 360 M. *Atoka*, one of the chief cities of the Choctaw Nation (p. 476), is the junction of a line to (14 M.) *Coalgate*, a mining town with 2614 inhab., and (133 M.) Oklahoma (p. 476). [From Coalgate we may go by train to *Tishomingo* (Capitol, $ 2) and *Ardmore* (5681 inhab.), two of the chief cities of the Chickasaws (p. 476).] 392 M. *Durant*. — At (411 M.) *Denison*, a railway-centre with 11,807 inhab., we enter *Texas* (p. 552). The line forks here, one branch running to (507 M.) *Fort Worth*, the other to (517 M.) *Dallas* (see p. 637). The two lines unite again at (562 M.; 55 M. from Fort Worth) *Hillsboro*. — 834 M. *Houston*, see p. 594; 884 M. *Galveston*, see p. 594.

b. Viâ Chicago and Alton Railroad.

489 M. Railway in 15 hrs. (fares as at p. 423). Dining-cars.

From *Chicago* to (126½ M.) *Bloomington*, see R. 58 b. The Kansas City line diverges to the right from that to St. Louis. — 171½ M. *Mason City*, with Memorial University. — 216 M. *Jacksonville* (620 ft.; Dunlap Ho., Pacific, from $ 2), a city of 15,078 inhab., with two colleges and several State asylums. — 237 M. *Roodhouse*, the junction of a line to *Godfrey* (p. 400). Beyond (243 M.) *Drake* we cross the *Illinois River*, and beyond (266 M.) *Pleasant Hill* we cross the Mississippi and enter *Missouri* (p. 430). — 302 M. *Vandalia*. Near (326 M.) *Mexico* (800 ft.), the junction of a line to *Jefferson City* (p. 427), is *Florida*, the birthplace of Mark Twain (Sam. L. Clemens; b. 1835). Beyond (381 M.) *Glasgow* (630 ft.) we cross the *Missouri*. 434 M. *Higginsville*; 487 M. *Grand Avenue* (p. 423).

489 M. **Kansas City**, see p. 423.

c. Viâ Wabash Railroad.

512 M. Railway in 22 hrs. (fares as at p. 423). Dining-cars.

From *Chicago* (Dearborn Station) to (173 M.) *Decatur*, where our line diverges from that to *St. Louis* (p. 410), see R. 58 c. — The next important station is (213 M.) *Springfield* (p. 400). 246 M. *Jacksonville* (p. 424). At (267 M.) *Naples* we cross the *Illinois River*. Beyond (301 M.) *Kinderhook* we cross the *Mississippi* and reach (313 M.) **Hannibal** (470 ft.; *Mark Twain*, $2\frac{1}{2}$-$3\frac{1}{2}$; *Union Depot Hotel*, $2-2\frac{1}{2}$, R. from 75 c.), in *Missouri*, a river-port and railway-centre (comp. p. 430), with 12,780 inhab., a brisk trade in tobacco, timber, and farm-produce, and numerous manufactories. About 1 M. to the S. is the *Hannibal Cave*, immortalized in 'Tom Sawyer', which runs for miles under the bluffs and the Mississippi itself. — From (383 M.) *Moberly* (880 ft.; 8012 inhab.) a branch-line runs to (57 M.) *Kirksville*, with the original American School of Osteopathy (700 students). 422 M. *Brunswick* (630 ft.). We now have a view of the *Missouri* to the left. 446 M. *Carrollton;* 470 M. *Lexington Junction* (p. 423). We skirt the N. bank of the Missouri and cross it at (510 M.) *Harlem*.

512 M. **Kansas City**, see p. 423.

d. Viâ Chicago, Rock Island, and Pacific Railway.

517 M. Railway in $14\frac{1}{2}$ hrs. (fares as at p. 423). Dining-cars (meals *à la carte*).

From *Chicago* to (183 M.) *Davenport*, see R. 65 c. Our line here diverges to the left from the Omaha line and runs towards the S.W. 210 M. *Muscatine* (545 ft.), on the W. bank of the *Mississippi* (p. 429). At (231 M.) *Columbus Junction* (585 ft.) we cross the *Red Cedar River*, and at (294 M.) *Eldon* the *Des Moines River*. At (378 M.) *Lineville* we enter *Missouri* (p. 430). 449 M. *Altamont*, the junction of a line to *St. Joseph* (see below). At (462 M.) *Cameron Junction* we diverge to the left from the line to *Leavenworth* (p. 470) and *Atchison* (p. 476). 492 M. *Kearney* (635 ft.); 516 M. *Harlem* (see above).

517 M. **Kansas City**, see p. 423.

e. Viâ Chicago Great Western Railway.

597 M. Railway in 21-24 hrs. (fares as at p. 423). Dining-cars.

From *Chicago* to (240 M.) *Oelwein*, where we diverge to the left (S.) from the line to *Minneapolis* and *St. Paul*, see p. 387. 266 M. *Waterloo* (City, from $2; Southern, $2), a busy little town with 12,580 inhab.; 314 M. *Marshalltown*. — 372 M. **Des Moines**, see p. 420. — At (427 M.) *Afton Junction* we intersect the Burlington and Quincy Railroad. Beyond (463 M.) *Blockton* we enter *Missouri* (p. 430). 491 M. *Conception*, the junction of a line to *Omaha* (p. 418).

528 M. **St. Joseph** (*Metropole*, $2-4; *St. Charles*, $2-3), a city of 102,979 inhab., on the E. bank of the *Missouri*, is an important

railway-centre and has immense stockyards, numerous factories (value of products in 1900, $31,690,736), and a large trade. The *City Hall* is a handsome building. — The train now descends on the E. bank of the Missouri. 548 M. *Dearborn*, the junction for *Atchison* (p. 476), on the other side of the river; 566 M. *Leavenworth* (p. 470).

597 M. **Kansas City,** see p. 423.

f. Viâ Burlington Route.

488 M. Chicago, Burlington, and Quincy Railroad in 14¾ hrs. (fares, etc., as at p. 423).

From *Chicago* to (163 M.) *Galesburg*, see R. 65d. Our line diverges from that to *Omaha* (p. 421) and runs towards the S. 191 M. *Bushnell;* 241 M. *Camp Point.*

262 M. **Quincy** (*Newcomb*, $ 2½-3½; *Tremont Ho.*, $ 2-3), with 36,252 inhab., lies on a high bluff on the E. bank of the *Mississippi.* It carries on a brisk trade, and its manufactures in 1900 were valued at $ 9,234,988. — 264 M. *West Quincy*, on the opposite bank of the river, is in *Missouri* (p. 430). We now follow the tracks of the *Hannibal and St. Joseph Railroad.* 277 M. *Palmyra Junction*, for the line to (15 M.) *Hannibal* (p. 425); 333 M. *Macon;* 392 M. *Chillicothe.* At (435 M.) *Cameron* the line forks, one branch leading to *St. Joseph* (p. 425). Our line runs to the S. by the route described above.

488 M. **Kansas City,** see p. 423.

g. Viâ Chicago, Milwaukee, and St. Paul Railway.

498 M. Railway in 14¾-15 hrs. (fares, etc., as at p. 423). This forms part of a through-route to San Francisco.

From *Chicago* to (138 M.) *Savanna*, see R. 65a. Our line here diverges to the left (S.) from that to *Omaha* (p. 417). 145 M. *Fulton;* 180 M. *Moline;* 183 M. *Rock Island* (p. 420); 186 M. *Davenport* (p. 420); 210 M. *Muscatine* (p. 429). At (292 M.) *Ottumwa* (p. 421) we cross the *Des Moines River.* Beyond (348 M.) *Sewal* we enter *Missouri* (p. 430). 412 M. *Chillicothe;* 458 M. *Lawson*, the junction for *St. Joseph* (p. 425); 465 M. *Excelsior Springs* (Benton, from $ 2½; Snapp's, $ 2½-5; Chadwick, $ 2, R. from $ 1).

498 M. **Kansas City,** see p. 423.

68. From St. Louis to Kansas City and Denver.

1041 M. Missouri Pacific Railway to (283 M.) *Kansas City* in 7-10 hrs. (fare $ 7.50; sleeper $ 2); thence to (1041 M.) *Denver* in 27 hrs. (through-fare $ 25.65; sleeper $ 5.50).

Kansas City may also be reached from St. Louis by the *Wabash R. R.* (277 M.), the *Chicago and Alton R. R.* (323 M.), and the *Chicago, Burlington, and Quincy R. R.* (337 M.); while from Kansas City to Denver the tourist may also travel by the *Atchison, Topeka, and Santa Fé Railway* (752 M.), the

Union Pacific Railway (639 M.; see R. 75 a), the *Chicago, Rock Island, and Pacific Railway* (633 M.), and the *C. B. & Q. R. R.* (654 M.). Over all these routes run through-cars for various large Western cities.

St. Louis, see p. 410. At (45 M.) *Labadie* (600 ft.) we reach the *Missouri River*, which flows on our right for the next 80 M. — 125 M. **Jefferson City** (625 ft.; *Madison Ho.*, $2-3; *Monroe Ho.*, $2; *Rail. Restaurant*), the capital of Missouri, is a prosperous place of 9664 inhabitants. The *State Capitol*, built in 1858-60, was enlarged in 1887-88. — A little farther on we leave the river. 188 M. **Sedalia** (890 ft.; *Huckins*, $2-2½; *The Antlers*, from $2) is a busy industrial city of 15,231 inhabitants.

The line forks at Sedalia, the left branch leading to Kansas City viâ Pleasant Hill (see below), while the right branch runs viâ (56 M.) *Lexington* (735 ft.), a place of 4190 inhab., on the S. bank of the Missouri.

At (249 M.) *Pleasant Hill* the line forks again.

The left branch, which affords an alternative route to Pueblo and Denver (1064 M. from St. Louis), runs viâ *Fort Scott*, *Eldorado*, and *Wichita* (p. 476), joining the route described below at *Geneseo* (572 M. from St. Louis).

We follow the right branch. 273 M. *Independence.*

283 M. **Kansas City**, see p. 423.

Our line now runs towards the S., entering *Kansas* at (310 M.) *Newington.* At (344 M.) *Ossawatomie* (3586 inhab. in 1907; Rail. Restaurant), the Kansas home of John Brown (monument), we turn to the right (W.). 365 M. *Ottawa* (900 ft.; The Tavern, Marsh, $2), a summer-resort with (1907) 7437 inhab.; 379 M. *Lomax*, the junction of a line to (39 M.) *Topeka* (p. 470); 397 M. *Osage City* (1075 ft.; 2679 inhab. in 1907); 435 M. *Council Grove* (1240 ft.; 2493 inhab. in 1907). — From (488 M.) *Gypsum City* (Rail. Restaurant) a loop-line runs to (17 M.) *Salina* (9060 inhab. in 1907) and back to (42 M.) Marquette. — 531 M. *Marquette.* At (550 M.) *Geneseo* we are joined by the line from Pleasant Hill mentioned above. We are now ascending the basin of the *Arkansas River*, which, however, flows far to the S. of the railway. At (584 M.) *Hoisington* we change from 'Central' to 'Mountain' time (1 hr. slower; p. xiv). 641 M. *Brownell;* 707 M. *Scott City;* 756 M. *Horace.* At (771 M.) *Towner* we enter *Colorado* (p. 471). Beyond (791 M.) *Brandon* we cross *Big Sandy Creek.* 846 M. *Arlington;* 901 M. *Boone.*

923 M. **Pueblo**, see p. 492. — Beyond Pueblo we follow the line of the *Denver and Rio Grande R. R.* (see R. 77 a).

1041 M. **Denver**, see p. 471.

69. From St. Paul to New Orleans by the Mississippi River.

The Mississippi, the 'Father of Waters', is one of the great rivers of the world, with a length of 2616 M. (or, reckoned from the source of the Missouri, of 4190 M.) and a drainage-basin nearly 1½ million sq. M. in area. It rises in the N. part of Minnesota, on the watershed between Hudson's

Bay and the Gulf of Mexico, and is a stream 12 ft. wide and 2 ft. deep after issuing from *Lake Itasca*. At first it runs towards the N.E., but soon turns towards the S.E., and its general course afterwards runs nearly due S., though with many bends and curves. The principal tributaries are the *Missouri*, which joins it from the W. about 1330 M. from its source; the *Ohio*, which comes in from the E. 220 M. farther on; and the *Arkansas* (W.). The best scenery is between St. Paul and St. Louis, where the river frequently flows between lofty and picturesque bluffs, 100-600 ft. high and 1-5 M. apart. The finest reaches are between St. Paul and Dubuque. After its junction with the Missouri the waters of the Mississippi become yellow and turbid, and it flows mainly through a flat and monotonous alluvial plain. As we near the Gulf of Mexico the vegetation becomes more and more tropical in character, and the river finally loses itself in a wilderness of creeks, bayous, and swamps, reaching the gulf through several outlets. The width of the Mississippi from St. Paul to New Orleans seldom varies much from 3000 ft., except at the bends, where it sometimes expands to 1 M. or 1½ M. — The United States Government has spent many millions of dollars in improving the navigation of the Mississippi, which is still apt to be interfered with by shallows and mud-banks; and a continuous 14-foot channel is now being made as far up as St. Louis. A very important work was the construction of the famous *Eads Jetties* (see p. 432) at one of the mouths of the river. Another mouth has recently been deepened and canalized. — The first European explorer of the Mississippi was *De Soto* (1541), who is supposed to have reached it a little below Helena (p. 431). — See 'Highways and Byways of the Mississippi Valley', by *Clifton Johnson* (1906).

Though there is a considerable traffic of smaller vessels above the *Falls of St. Anthony* (p. 391), the navigation proper of the Mississippi begins at *St. Paul*. The steamers of the *Diamond Jo Line* leave *St. Paul* twice weekly in summer for (729 M.) *St. Louis*, which they reach in 3½ days (fare $ 16, incl. berth and meals). At the time of going to press there were no passenger-steamers plying from St. Louis to New Orleans; but as the service may be resumed at any time, and as steamers ply upon various sections of the route (*e.g.* between Vicksburg and Greenville), the description in the following pages has been left as if steamers still ran the whole distance. In any case few travellers would care to make the whole journey from St. Paul to New Orleans; but a day or two on the river will be found an agreeable change from the dusty railways. The boat-companies issue combination-tickets, allowing any part of the journey the traveller selects to be traversed by railway; and liberal 'stop-over' privileges are granted on all tickets.

The commerce carried on by the Mississippi and its tributaries is estimated to attain a bulk of 28,000,000 tons annually and to employ 9700 vessels and 15,300 men (14,000,000 passengers).

In the following description of the voyage down the river only the more important places on the banks are mentioned. The distances are reckoned from St. Paul.

St. Paul, see p. 388. The steamer passes under five bridges. For the first 25 M. or so both banks of the river are in *Minnesota* (p. 384), but beyond the mouth of the *St. Croix River* (left) the E. bank is in *Wisconsin* (p. 380).

27 M. (right bank) *Hastings* (swing-bridge), see p. 384.

30 M. (l.) *Prescott* (swing-bridge), at the foot of *Lake St. Croix*, an enlargement of the river of that name.

52 M. (r.) *Red Wing* (p. 384), with *Barn Bluff* (200 ft.). A little farther on the steamer traverses the beautiful expansion of the river known as *Lake Pepin (p. 384). To the left rises the

Maiden Rock (410 ft.), to the right is the bold round headland called *Point No Point.*

67 M. (r.) *Frontenac*, see p. 384. — 73 M. (r.) *Lake City* (p. 384). — 79 M. (l.) *North Pepin.* — 84 M. (r.) *Read's Landing* (pontoon bridge), at the lower end of Lake Pepin and opposite the mouth of the *Chippewa.* — 87 M. (r.) *Wabasha*, see p. 384. — 117 M. (l.) *Fountain City.* The next stretch of the river abounds in islands, and the flanking bluffs are very picturesque in outline. — 125 M. (r.) *Winona* (two bridges), see p. 384. — 137 M. (l.) *Trempealeau*, at the mouth of the *Black River.* **Trempealeau Island*, 635 ft. high, commands a beautiful view. This is, perhaps, the most beautiful section of the Upper Mississippi.

156 M. (l.) **La Crosse** (two swing-bridges), see p. 384. The scenery continues to be attractive, while the towns and villages on the banks now follow each other in closer succession.

187 M. (l.) *Victory.* Nearly opposite is the boundary between Minnesota and *Iowa* (p. 420), where 'Black Hawk' met his final defeat. — 199 M. (r.) *Lansing* (Iowa). — 228 M. (l.) *Prairie du Chien* (pontoon-bridge), near the mouth of the *Wisconsin River* (see p. 386). Fishing for clam-shells for pearl-buttons is carried on in this part of the river, and not a few fresh-water pearls are found in the course of it. — 231 M. (r.) *McGregor* (pontoon-bridge). — 252 M. (r.) *Guttenberg.* — 260 M. (l.) *Cassville.* — 289 M. (l.) *East Dubuque* (p. 386) lies in *Illinois* (p. 357), just beyond the frontier of Wisconsin. Nearly opposite rises *Eagle Point* (300 ft.).

290 M. (r.) **Dubuque** (two bridges), see p. 386. The bluffs now become lower and the scenery tamer. — 335 M. (l.) *Savanna* is connected with (337 M.; r.) *Sabula* (p. 417) by a railway-bridge.

355 M. (l.) *Fulton* (p. 586), *Lyons* (r.), and —

357 M. (r.) *Clinton* (p. 419) are connected by three bridges. — Beyond (381 M.; r.) *Le Claire* we shoot the picturesque *Upper Rapids*, which extend hence to Rock Island.

397 M. (l.) **Rock Island** (p. 420) and (398 M.; r.) **Davenport** are united by the fine bridge mentioned at p. 420. A good view is obtained of the *Government Island* and *Arsenal.* — 426 M. (r.) *Muscatine* (bridge; Commercial, $ 2), a thriving city with (1905) 15,087 inhab., carries on a brisk trade in timber, sweet potatoes, and melons, and has several pearl-button factories (comp. above). — 449 M. *New Boston* (l.). — 455 M. (l.) *Keithsburg* (bridge; 1566 inhab.).

480 M. (r.) **Burlington** (bridge), see p. 421. — 494 M. (l.) *Dallas City.* — 504 M. (r.) *Fort Madison* (bridge), see p. 423. — 512 M. (l.) *Nauvoo*, a place of 1321 inhab., was once a flourishing Mormon city with a population of 15,000 (see p. 500). — 515 M. (r.) *Montrose* lies at the head of the *Lower Rapids*, which extend hence to (527 M.; r.) **Keokuk** (bridge; *Keokuk Hotel*, R. from $ 1; 14,604 inhab. in 1905), at the mouth of the *Des Moines River*, here forming

the boundary between Iowa and *Missouri* ('Bullion State'). — 531 M. (l.) *Warsaw.* — 551 M. (r.) *Canton* (2367 inhab.). — 558 M. *La Grange* (r).

568 M. (l.) **Quincy** (bridge), see p. 426. — 588 M. (r.) *Hannibal* (bridge), see p. 425. — 616 M. (r.) *Louisiana* (bridge; 5130 inhab.). — 626 M. (r.) *Clarksville.* — 641 M. (l.) *Hamburg.* — 663 M. (r.) *Cap au Gris.* — 690 M. (l.) *Grafton*, at the mouth of the *Illinois River.* — 706 M. (l.) *Alton*, see p. 400.

About 3 M. farther on we reach the confluence of the Mississippi and the **Missouri**. The latter river, flowing in from the N.W., has a longer course than the Mississippi up to their junction (2908 M., as compared with 1330 M.) and contributes a greater volume of water to the joint stream, so that it would seem that the name Mississippi in its application below this point has clearly usurped the place of the Missouri. The clear waters of the Mississippi long refuse to mingle with the turbid flood of the Missouri. Efforts are now being made to revive the navigation of the Missouri and improve tis channel.

729 M. **St. Louis** (410 ft.) and its magnificent bridges are described in R. 63. This is the terminus of the Diamond Jo Line Steamers (comp. p. 428).

The scenery of the Lower Mississippi differs materially from that of the Upper Mississippi (comp. p. 428), and the place of landscape beauty is taken to some extent by historic interest. The towns and villages on the banks usually follow each other rapidly, and innumerable islands are passed. The great levees or embankments guarding the river are a prominent feature.

Soon after we leave St. Louis, *Jefferson Barracks* (p. 416) are seen to the right. 761 M. (32 M. from St. Louis; r.) *Crystal City* (see p. 416). — 789 M. (r.) *Ste. Genevieve* (1707 inhab.). — 809 M. (l.) *Chester* (2832 inhab.), with a large penitentiary. — Near (849 M.; l.) *Grand Tower*, a favourite resort of the citizens of St. Louis, we pass the island known as the *Devil's Tea Table.* — 879 M. (r.) *Cape Girardeau* (4815 inhab.). — 894 M. (r.) *Commerce.* The large island to the right, a little farther on, is *Power's Island.*

929 M. (l.) **Cairo** (315 ft.), at the mouth of the *Ohio*, see p. 588. — 951 M. (l.) *Columbus* (bridge), the first landing-place in *Kentucky* (p. 567), was strongly fortified by the Confederates in the Civil War, but was ultimately abandoned without attack. Just beyond is *Wolf Island* or *Island No. 5.* — 967 M. (l.) *Hickman* (1590 inhab.). — *Island No. 10*, off (986 M.; r.) *Donaldson Point*, was also strongly fortified in the war and was captured by the Federal gun-boats in April, 1862, after a month's bombardment. — 988 M. (l.) *Wades*, nearly opposite, is in *Tennessee* (p. 583). — 999 M. (r.) *New Madrid*, with 1490 inhab., was captured at the same time as Island No. 10. — 1017 M. (l.) *Tiptonville.* A little to the E. lies *Reelfoot Lake.* — Numerous small landings are now passed. — 1074 M. (r.)

Hickman's is in *Arkansas* (p. 589). — 1119 M. (l.) *Fort Pillow*, on the *First Chickasaw Bluff*, evacuated by the Confederates in 1862, was the scene of what is known as the *Fort Pillow Massacre* (April 12th, 1864). The river now winds considerably and passes several islands, the largest of which are named *Centennial* and *Brandywine*.

1179 M. (l.) **Memphis** (180 ft.; bridge), see p. 586. Farther on numerous windings are threaded. — 1207 M. (l.) *De Soto* is the first station in *Mississippi* (p. 574). — 1261 M. (r.) *Helena* (140 ft.; railway-ferry), near the mouth of the *St. Francis* (with its extensive levees), is a busy little city with 5550 inhab. and a trade in timber. — Numerous small stations. — 1358 M. (r.) Mouth of the *White River*, which rises in Missouri and joins the Mississippi after a course of 700 M.

1365 M. (r.) *Black Hawk* lies at the mouth of the *Arkansas River*.

The **Arkansas River** rises in the Rocky Mts., to the W. of South Park (p. 475), and has a course of 1600 M., of which 800 M. are navigable.

Beyond the *Choctaw Bend* we reach (1419 M.; r.) *Arkansas City* (95 ft.; 1090 inhab.). — Passing *Rowdy Bend*, *Miller's Bend*, *Island 82* (1431 M.), and *Bachelor's Bend*, we reach (1456 M.; l.) *Greenville*, a small cotton-trading city with 7642 inhabitants. The banks are now lined with cotton-plantations, which afford a very interesting sight in time of harvest (Sept.-Nov.). The planters' houses, especially as we approach the S., are often roomy and quaint old mansions, surrounded with groves of fine trees. Many of the trees are fantastically draped with Spanish moss *(Tillandsia usneoides)*. — 1484 M. (r.) *Grand Lake* is the first station in *Louisiana* (p. 575). No places of any great size or importance are passed till we reach —

1579 M. (l.) **Vicksburg** (40 ft.; railway-ferry; see p. 587). — 1636 M. (r.) *St. Joseph*. — 1642 M. (l.) *Rodney*.

1691 M. (l.) **Natchez**, see p. 587. — 1756 M. (l.) *Fort Adams*. — 1767 M. (r.) *Red River Landing*, at the mouth of the *Red River*. Beyond this point both banks of the river are in Louisiana. — 1813 M. (l.) *Bayou Sara*. Oranges and figs may now be seen growing in the open air. The 'Swampers' of Bayou Sara are a peculiar community of wood-cutters living on raft-houses floating in the swamps.

1851 M. (l.) *Baton Rouge*, see p. 587. The course of the river between this point and New Orleans is very circuitous. Several sugar-plantations are passed. — 1871 M. (r.) *Plaquemine*. — 1883 M. (r.) *Bayou Goula*. — 1896 M. (r.) *Donaldsonville* (4105 inhab.). — 1912 M. (l.) *Convent*. — 1917 M. (l.) *Belmont Plantation*. — 1943 M. (l.) *Bonnet Carré Point*. — 1954 M. *Red Church*. — 1964 M. (l.) *Kennerville*. — 1973 M. *Carrollton* (p. 636).

1981 M. **New Orleans**, see p. 631.

Below New Orleans the trees disappear, the river banks become less defined, and the river finally loses itself in a vast marsh, through which various 'passes' or channels lead to the Gulf of Mexico. Near New Orleans are many vegetable-gardens and small fruit-farms, often irrigated by syphon pipes, straddling the levee. About 70 M. from New Orleans the ocean-steamers pass between *Fort St. Philip* (left) and *Fort Jackson* (right) and soon after enter the *South Pass*, marked by lighthouses. At the lower end of the S. Pass are the wonderful *Eads Jetties, constructed by Capt. Eads (p. 415) in 1875-79 at a cost of $5,000,000 (1,000,000*l.*) and forming a channel 30 ft. deep where formerly the draught was not more than 10 ft. The jetties, $2^1/_3$ and $1^1/_2$ M. long, are constructed of willow rods, rubble, and concrete. The ends of the jetties, marked by two lights, may be called the mouth of the Mississippi, beyond which we are on the *Gulf of Mexico*.

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86.	The Yosemite Valley Excursions in the High Sierra 547. — Wawona and the Mariposa Grove of Big Trees 548.	540
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70. From St. Paul to Everett and Seattle.

1828 M. Great Northern Railway to (1795 M.) *Everett* and (1828 M.) *Seattle* in about 2¾ days (fare, 1st class $ 50, 2nd cl. $ 40; sleeper $ 12, family tourist-car $ 6). Through-carriages also run by this route to (1179 M.) *Helena* in 35 hrs. (fare $ 32.50; sleeper $ 7) and to (1254 M.) *Butte* in 37 hrs. (same fares). — The finest route from the Twin Cities to the Pacific Coast is that afforded by the Soo Line in combination with the Canadian Pacific Railway. The Soo Line runs through the best agricultural region of N. Dakota to (560 M.) *Portal*, on the Canadian frontier. Hence to the coast, through the magnificent scenery of the Canadian Rockies and the Selkirks, see *Baedeker's Canada*.

From St. Paul to (217 M.) *Barnesville*, see R. 57b. At (299 M.) *Crookston* we cross the *Red Lake River* and turn to the left (W.).

Some trains run from Barnesville to Grand Forks viâ *Fargo* (p. 398), and others follow the route from St. Paul viâ *Breckenridge* (p. 398).

At (324 M.) *Grand Forks* (p. 398) we cross the Red River and the Manitoba-Pacific route (R. 57) and enter *North Dakota* (p. 439) continuing to traverse a great wheat-country. At (345 M.) *Larimore* we change to 'Central' time (p. xiv). — 409 M. *Devil's Lake* (1490 ft.; Sevilla, $2) lies on the N. shore of the large lake of that name, 50 M. long and 2-8 M. wide, with good bathing and fishing (pickerel, etc.). On the S. shore lie *Fort Totten*, a U. S. military post (reached by steamer), and the *Cuthead Sioux Indian Reservation.* Flocks of wild geese are often seen from the train in this region in spring and autumn. — From (428 M.) *Church's Ferry* and (466 M.) *Rugby* lines run N. to points in the *Turtle Mts.* At (485 M.) *Towner* and again at (526 M.) *Minot* we cross the *Mouse River.* At (648 M.) *Williston*, where we change to 'Mountain' time (p. xiv), we reach the *Upper Missouri River*, which flows to the left. 668 M. *Fort Buford*, an important military station, lies on the Missouri, opposite the mouth of the *Yellowstone* (p. 440). Farther on we enter *Montana* (p. 440). 733 M. *Poplar*, a military post, with a large Indian school. Beyond (789 M.) *Nashua* we leave the Missouri and follow the *Milk River*, through a grazing district. 804 M. *Glasgow;* 861 M. *Bowdoin;* 902 M. *Savoy.* Near (935 M.) *Chinook* the *Bear Paw Mts.* and the *Little Rockies*, spurs of the Rocky Mts., are seen to the left.

957 M. *Havre* (2480 ft.).

From Havre to (222 M.) Helena and (295 M.) Butte, *Great Northern Railway* in 10-14 hrs. — This line actually quits the trunk line at (4 M.) *Pacific Junction* (see below) and runs towards the S. 7 M. *Fort Assiniboine*, amid the foot-hills of the Bear Paw Mts., is one of the largest and best-equipped military posts in the United States, and has a garrison of coloured troops. — 79 M. *Fort Benton*, on the *Missouri*, which the line now follows. — 124 M. Great Falls (3200 ft.; *Park Hotel*, from $3) is a brisk and growing little industrial city of (1900) 14,930 inhab., with large copper-smelting works. It derives its name and importance from the falls formed here by the Missouri, with a total descent of 500 ft. The river contracts here from a width of upwards of ½ M. to one of 300 yds. and descends over the *Black Eagle Falls* (50 ft.), *Colters Falls* (12 ft.), *Crooked Falls* (20 ft.), **Rainbow Falls* (48 ft.), and *Great Falls* (92 ft.). Near Rainbow Falls is the *Giant Spring Fall*, formed by a spring or river bursting from the bank of the Missouri, 20 ft. above the channel. Branch-lines run S. from Great Falls to (64 M.) *Barker* and (66 M.) *Neihart* (Belt Mts.) and N. to (199 M.) *Lethbridge* (Canada). — About 50 M. beyond Great Falls the train enters the *Prickly Pear Canyon*, threading the *Gate of the Mountains, where the Missouri breaks through the rocky mountain-wall. Farther on we leave the river. — 222 M. Helena, see p. 441. — From Helena to (295 M.) Butte, see p. 441. At Butte we make connection with the *Oregon Short Line* for points to the W. (comp. p. 467).

Beyond Havre our line runs nearly due W. through a grazing country, with the *Sweet Grass Hills* to the N. 961 M. *Pacific Junction* (see above). At (1037 M.) *Galata* (3370 ft.) we have our first view of the Rocky Mts. (p. 436). 1061 M. *Shelby Junction* (3275 ft.), for lines to *Great Falls* (see above) and *Lethbridge* (Canada). 1112 M. *Blackfoot* (4140 ft.), in the Blackfeet Reservation (ca. 2000 Indians); the Government Agency and School are seen to the right (N.); little farther on. To the N.W., in the distance, towers the slender *Chief Mt.* (10,800 ft.). At (1146 M.) *Summit* (5200 ft.) we cross

the *Rocky Mts.*, at an elevation 300-3000 ft. lower than that of any other American railway (comp. pp. 442, 460). The scenery on the W. slope of the Great Divide is imposing. — 1191 M. *Belton* (3210 ft.).

This is the station for *Lake McDonald (3150 ft.), a charming lake 17 M. long and 4-5 M. broad, situated 3 M. to the N., in the heart of the Rockies. It is traversed by a steam-launch, and at the N. end is the *Glacier House*, an unpretending inn, whence excursions may be made to the **Sperry Glacier*, **Avalanche Basin* and *Lake* (4000 ft.), and other points.

We cross the *Flathead River* near (1206 M.) *Columbia Falls*, the junction of a line running through the *Flathead Valley* to *Kalispell*, *Marion*, and *Melbourne*. Our line runs to the N.W. and crosses the *Kootenai River* at (1262 M.) *Tobacco*. We then follow this river to (1275 M.) *Rexford*, (1318 M.) *Jennings* (2110 ft.), *Kootenai Falls* (1341 M.), and (1348 M.) *Troy* (1880 ft.), where we pass from 'Mountain' to 'Pacific' time (p. xiv). Beyond (1355 M.) *Yakt* we enter *Idaho* (p. 443). From (1380 M.) *Bonner's Ferry* (1760 ft.) the Kootenai Valley Railway runs to the *Kootenai Lake District* (comp. *Baedeker's Canada*). The line now bends to the S. 1414 M. *Sand Point*, on *Lake Pend d'Oreille* (p. 443). Farther on we cross the *Priest River* and *Clark's Fork of the Columbia*. We enter the *State of Washington* (p. 443) at (1443 M.) *Newport* (2120 ft.).

1489 M. **Spokane** (1910 ft.), see p. 443. Beyond Spokane the line runs almost due W., crossing the *Big Bend Wheat Region*. In the harvest-season we may sometimes catch a glimpse of a 'header', a machine, drawn by about 20 horses, which cuts, threshes, and cleans the wheat and packs it in sacks. 1523 M. *Edwall;* 1527 M. *Harrington* (2165 ft.). We now descend, and near (1651 M.) *Rock Island Rapids* we cross the *Columbia River* (p. 468), which we follow to (1663 M.) *Wenatchee* (630 ft.), whence steamers ply to **Lake Chelan*, situated amid splendid mountain and glacier scenery. The line then follows the *Wenatchee* for many miles. At (1674 M.) *Cashmere* (785 ft.) beautiful red and yellow roses are offered for sale in summer (5 c. a basket). Beyond (1686 M.) *Leavenworth* (1165 ft.) we pass through the picturesque **Tumwater Canyon*. Two engines are needed to haul the train up the ascent of the *Cascade Mts.* (p. 444). 1718 M. *Cascade Tunnel Station* (3375 ft.) lies at the E. end of the huge tunnel (2½ M. long) bored through the range in 1897-1900, at a cost of $ 2,500,000. At the W. end of the tunnel, which is 2000 ft. below the top of the mountain above and saves 9 M. of curves and zigzags, is (1722 M.) *Wellington* (3125 ft.). We now descend on the W. side of the Cascade Range. The train runs through vast forests and along the *Skykomish River* to (1743 M.) *Skykomish*, (1757 M.) *Index* (515 ft.), *Snohomish* (1786 M.; p. 438), and —

1795 M. **Everett** (*Mitchell*, $ 2½), a prosperous little industrial city (7838 inhab. in 1900) on *Puget Sound* (p. 674), where we reach tide-water. Mt. Baker (p. 674) is visible to the N., Mt. Olympus to the W., and Mt. Rainier (p. 446) to the S.

The Great Northern Railway forks at Everett, one branch running

to the N. to *Vancouver* (see p. 438), while the main line turns to the left (S.) and runs along Puget Sound (finally through a tunnel) to —

1828 M. **Seattle.** — New Washington, R. from $ 2½; Butler, R. $ 1-5; Savoy, R. from $ 1; Perry, R. from $ 2; Rainier-Grand, R. from $ 1; Washington Annex, from $ 3, R. from $ 1; Butler Annex, from $ 2½, R. from $ 1; Lincoln Hotel, with roof-garden, from $ 3½, R. from $ 1. — *Electric Tramways* traverse the chief streets.

Brit. Vice-Consul. — *German Consul*, Mr. A. Geissler.

Steamer from Seattle to Victoria and Alaska, see R. 120. Steamers also ply to other ports on the Pacific Coast, to Japan, and to Europe.

Seattle (three syllables), finely situated in *Elliot Bay*, on a series of terraces rising from the shore of the Sound, is one of the largest and most energetic cities of the Pacific North-West and the commercial centre of Puget Sound. Founded in 1852 and named after an Indian chief, it had 3533 inhab. in 1880, 42,837 in 1890, and 80,671 in 1900 (now more than doubled). Almost the whole of the business-quarter was burned down in 1889, but it has been rebuilt in a more substantial manner. Among the finest edifices are the *Roman Catholic Cathedral*, the *Union* or *King St. Passenger Station*, the *Carnegie Library*, the *American Bank*, and the *Alaska*, *Lowman*, *White*, *Central*, and *Empire Buildings*. The statue of *Wm. H. Seward* (1801-72) is by Richard Brooks. The *State University* has 1400 students, and its grounds (355 acres in extent) furnished the site of the Alaska-Yukon-Pacific Exposition of 1909 (June-Oct.). In the campus is a colossal statue of *Washington*, by Lorado Taft. At Magnolia Bluff is a *U. S. Army Post.* Seattle possesses a *Buddhist Church.* The *Totem Pole* in Pioneer Sq., near the Union Station, was brought from Alaska and is a good example of its kind (comp. p. 679). The higher parts of the city command splendid views of the Olympic Mts. — The spacious *Harbour* is entered and cleared annually by about 2000 vessels, the chief exports being coal, timber, hops, and fish. The value of Seattle's manufactures in 1907 was $ 60,000,000, of its commerce $ 140,500,000. Iron has also been found in the neighbourhood. Seattle is the chief entrepôt of the Alaskan Gold Fields (p. 679), and a large amount of gold dust may often be seen in the *U. S. Assay Office.*

About 2 M. to the E. of Elliot Bay lies *Lake Washington (easily reached by electric tramway), a beautiful sheet of fresh water, 20 M. long and 2-5 M. wide. Small steamers ply to various points on the lake, affording good views of the *Cascade Mts.* (p. 444). *Public Parks* have been laid out on the banks of this lake and at other points in the environs.

The traveller should not fail to make the excursion to the **Snoqualmie Falls* (270 ft. high), easily done in 24 hrs. by the Northern Pacific Railway (56 M., viâ *Woodinville*). — An easier excursion is that across Puget Sound (1½ hr. by steamer) to *Bremerton*, on Port Orchard Bay, with a U. S. Navy Yard and a huge dry-dock. — Another popular trip (taking from 7.30 a.m. to 4.30 a.m.) is that to *Hood's Canal*, a narrow arm of the Sound affording a close view of the Olympic Mts. (see below).

Travellers with time to spare will find it well worth their while to make an excursion to the **Olympic Mts.*, the comparatively unknown scenery of which (incl. many glaciers and magnificent firs and cedars) is of a very striking character. The best scenic centre is *Crescent Lake* (Marymere Hotel,

$ 2), ca. 20 M. (stage in 4 hrs.) from *Port Angeles* (Merchants, $ 2), which is reached from Seattle by steamer (return-fare $ 6). The visitor should ascend *Mt. Storm King* (3700 ft.; 5 hrs.) and then devote two days (night spent on summit) to *Mt. Alura* or *Sourdough* (5700 ft.), to the S. of the lake, which commands a superb View. The highest summit is *Mt. Olympus* (8131 ft.), ca. 15 M. to the S.E. of Crescent Lake. The lake contains 10 varieties of trout, including two unknown elsewhere.

From Seattle to Vancouver by the *Great Northern Railway*, 168 M., in 6-8 hrs. This line runs to the N. along the E. bank of Puget Sound and Washington Sound. From Seattle to (33 M.) *Everett*, see pp. 437, 436. 55½ M. *Stanwood;* 93 M. *Bellingham* (Byron, Baker, from $ 2½), a rapidly growing seaport (25,000 inhab.) on *Bellingham Bay*. Beyond (119 M.) *Blaine* we enter *British Columbia*. 143½ M. *New Westminster* (Guishon, $ 2-3), with 6500 inhab., is the oldest place in this region. At (156 M.) *Port Moody* we join the main line of the *Can. Pac. Railway*. — 168 M. Vancouver, see *Baedeker's Canada*.

From Seattle to Vancouver by the *Northern Pacific Railway*, 178 M., in 9 hrs. This line also runs directly to the N. along the E. shore of Puget Sound. — From (38 M.) *Snohomish* (3000 inhab.; New Brunswick, $ 2) branch-railways run to (8 M.) *Everett* (p. 436) and to (50 M.) *Monte Cristo*, while stage-lines start here for the gold and silver mining camps at *Sultan River* and *Silver Creek*. — 46 M. *Hartford;* 60 M. *Arlington;* 86 M. *Sedro-Woolley*, the junction with the Great Northern Railway. At (126 M.) *Sumas* our train enters British Columbia and joins the Can. Pac. Railway. 136 M. *Mission Junction;* 161 M. *Westminster Junction*, for (9 M.) *New Westminster* (see above). — 178 M. Vancouver, see *Baedeker's Canada*.

From Seattle to *Tacoma* by railway, see p. 445; to *N. Yakima* and *Pasco Junction* (for the E.), see p. 444. Lines also run to various other points.

71. From St. Paul to Tacoma, Seattle, and Portland.

2052 M. Northern Pacific Railway to (1907 M.) *Tacoma* in 60 hrs. (1st class fare for continuous passage $ 50, available for 30 days $ 60; 2nd class fare $ 40; sleeper $ 12), to (1911 M.) *Seattle* in 60 hrs. (same fares), and to (2052 M.) *Portland* in 71 hrs. (same fares). *Duluth* (p. 393) is also one of the E. termini of this line, the line thence uniting with the St. Paul line at Staples (p. 439).

This important railway crosses a district of immense agricultural and mineral wealth and forms one of the main lines of communication between the E. and W. coasts of the United States, besides affording convenient access to British Columbia, Vancouver Island, and Alaska. Much of the scenery on the W. portion of the line is very fine, and the branch-line from Livingston (see p. 441) affords a direct route from the N. to the wonderful *Yellowstone Park* (R. 72; through-sleepers to Gardiner, p. 450).

St. Paul, see p. 388. We follow the E. bank of the *Mississippi* (views to the left), passing the *State Fair Buildings* (p. 390) and *Hamline University*. At (10 M.) *Minneapolis* (see p. 390) we cross and recross the river. 29 M. *Anoka;* 41 M. *Elk River;* 76 M. *St. Cloud* (p. 398). Our line now parts company with that of the Great Northern Railway (R. 70). 77 M. *Sauk Rapids*. From (108 M.) *Little Falls* (Buckman, $ 2-2½), where we leave the Mississippi Valley, branch-lines run to (30 M.) *Brainerd* (1230 ft.), an industrial city with (1905) 8133 inhab. and the N.P.R. workshops (on the line to Duluth, p. 393), and to (60 M.) *Glenwood* and (88 M.) *Morris*.

From Brainerd the *Minnesota & International Railway* runs to (61 M.) *Walker* (White City, R. from $ 1 Chase, $ 2), on *Leech Lake* (37 M. long and 17 M. wide), in the midst of a fine shooting and fishing district; to (92 M.) *Bemidji* (Markham, $ 2-3), on the lake of that name; and to (199 M.) *International Falls*, on the Canadian boundary.

The main line crosses the Mississippi and runs direct (N.W.) to (142 M.) *Staples*, where the trains from *Duluth* come in (p. 438). 159 M. *Wadena* is the junction of a branch-line to (69 M.) *Fergus Falls* and (168 M.) *Oakes* (N.D.), where it connects with the branch-line running N. to *Jamestown* (see below). 172 M. *New York Mills*, with a large settlement of Finns. Many small lakes are passed. — 204 M. *Detroit* (1364 ft.; Minnesota, $2-3), on one of a series of pretty lakes, has mineral springs and good shooting and fishing. About 25 M. to the N. is the *White Earth Reservation* of the Chippewa or Ojibway Indians. — 224 M. *Winnipeg Junction*, for a line to (257 M.) *Winnipeg* (R. 57c). At (241 M.) *Glyndon* we cross the G. N. Railway.

249 M. **Moorhead** (905 ft.; *Columbia*, $2-2½), a thriving flour-making city of (1905) 4794 inhab., lies on the E. bank of the *Red River of the North*, opposite (250 M.) **Fargo** (*Metropole*, *Waldorf*, from $2½), another busy grain-trading city (12,512 inhab. in 1905), which lies in *North Dakota* ('Great Cereal State'). Fargo is the junction of a line to (87 M.) *La Moure*, (108 M.) *Edgeley*, and (149 M.) *Streeter*.

From Moorhead to *Winnipeg*, see p. 393.

In traversing N. Dakota we pass some of the huge prairie farms for which the 'Great North-West' is famous.

Some of these 'Bonanza' farms are 10-70 sq. M. in extent, and it is no unfrequent sight to see a row of 20 or more ploughs, harrows, seeders, or reapers at work at once. Continuous furrows have been ploughed for many miles in a straight line. Harvesting generally begins about Aug. 1st, and the vast expanses of yellow grain afford an extraordinary and very beautiful sight. A yield of 20-25 bushels per acre is often attained. North Dakota, in a good year, produces 90-100 million bushels of wheat.

Near (270 M.) *Casselton* (junction of a line to *Marion*, 60 M.) is the great *Dalrymple Farm*, with an area of 15,000 acres (23 sq. M.). 292 M. *Tower City*, with a mineral artesian well. 308 M. *Valley City*, on the *Sheyenne River*. From (319 M.) *Sanborn* a branch-line goes N. to (37 M.) *Cooperstown* and (63 M.) *McHenry*. — 343 M. **Jamestown** (1395 ft.; *Gladstone*, $2-3), an agricultural centre with (1905) 5093 inhab., the *N. Dakota Insane Hospital*, and a *Presbyterian College*, is prettily situated on the *James* or *Dakota River*.

A branch-line runs hence N. to (90 M.) *Minnewaukan*, on *Devil's Lake* (p. 435), and (108 M.) *Leeds*; another runs S. to (69 M.) *Oakes* (see above).

The line now traverses the rolling district between the James and the Missouri known as the *Coteaux* (400 ft. above the rivers). Several small stations. — 445 M. **Bismarck** (1670 ft.; *Grand Pacific*, $2-3), the capital of N. Dakota, on the E. bank of the *Missouri*, here 400 yds. wide. It is the headquarters of navigation on the Upper Missouri and contains the *State Capitol*, the new *Fort Lincoln* (comp. p. 440), and several other U. S. institutions. Pop. (1905) 4913.

The train crosses the river by a fine steel and iron truss-bridge, with three main spans of 400 ft. each, 50 ft. above high-water. 450 M. *Mandan* (Inter-Ocean, $2-2½; Nigey, $2), on the W. bank. We change here from 'Central' to 'Mountain' time (1 hr. slower; see p. xiv). Fine mounted heads and fur-rugs are sold at the station.

About 6 M. to the S. lies the old *Fort Abraham Lincoln* (abandoned). Near Mandan are numerous remains of the old earthen lodges of the Mandan Indian, a handful of whom still subsist in a reservation on the Missouri, 100 M. to the N.W. We cross the *Heart River* several times in rapid succession. The district we now traverse is very sparsely populated. Large numbers of prairie-dogs (a kind of marmot) are seen. Sharp conical elevations known as 'buttes' (pron. butes) rise from the plain in all directions. Near (549 M.) *Gladstone* we again cross the Heart River. 560 M. *Dickinson.* At (580 M.) *Belfield* we enter the district known as ***Bad Lands** or **Pyramid Park,** where the buttes have been carved by the action of fire and water into the most fantastic shapes. The colouring is also very variegated. The name 'Bad Lands' refers properly to the difficulty of travel and not to the soil, which affords excellent grazing. — From (600 M.) *Medora* (2265 ft.; hotel), on the E. bank of the *Little Missouri*, we may visit Pyramid Park and the Burning Mine (7 M.). About 16 M. farther on the curious *Sentinel Butte* is conspicuous to the left, and in 8 M. more we enter *Montana* ('Treasure State'), the third-largest state of the Union, in which cattle and sheep raising and mining are the chief industries. The native 'bunch grass', which cures itself and stands as hay throughout the winter, forms excellent fodder.

666 M. *Glendive* (2070 ft.; Jordan, $ 2½) lies among picturesque scenery on the S. bank of the *Yellowstone River*, which the line now follows for a long distance. Numerous small tributaries of the Yellowstone are crossed. — 745 M. *Miles City* (2350 ft.; Coggshall, R. from $ 1; Leighton, $ 2-3), a busy little place at the confluence of the Yellowstone and the *Tongue.* 747 M. *Fort Keogh*, a U. S. military post; 778 M. *Rosebud*, at the mouth of the *Rosebud River;* 833 M. *Big Horn* (2690 ft.), at the mouth of the *Big Horn River*, which we cross by a long bridge (Bighorn Mts., see p. 422). We then thread a tunnel 1100 ft. long. About 30 M. to the S. of (839 M.) *Custer* (coach) is *Fort Custer*, and 15 M. farther to the S. is the spot where Gen. Custer and his command of over 250 men were annihilated by the Sioux in 1876 (the 'Custer Massacre'; comp. p. 422). Fort Custer lies in the midst of an extensive territory to the S. of this part of the Yellowstone, which has been set apart as a reservation for the Crow Indians (ca. 3000 in number). At (863 M.) *Pompey's Pillar*, the rock of that name rises on the right, so christened by Capt. Wm. Clark (Lewis and Clark Expedition) in 1806. To the left, near Billings, is *Skull Butte*, so named from an Indian legend. A large tract of desert near this part of the line has been reclaimed by the irrigation-works of the U. S. Government. Beyond (892 M.) *Billings* (3115 ft.; Northern, R. from $ 1; Grand, from $ 2½) the scenery increases in grandeur, and snow-capped mountains appear in the distance. From Billings to *Lincoln*, by the Burlington system, see p. 422. — From (907 M.) *Laurel* a branch-line runs to (45 M.) *Red Lodge*, in the heart of the coal-mining district. — We cross the

Yellowstone and skirt its N. bank to (932 M.) *Columbus*, where we return to the S. side. 973 M. *Big Timber*, near the mouth of the *Big Boulder Creek* (good fishing). To the N. rise the snow-clad *Crazy Mts.* 988 M. *Springdale*, the station for (2½ M.) *Hunter's Hot Springs* (hotel; 148-168° Fahr.), at the foot of the Crazy Mts. Fine views of the *Little Belt Mts.* to the right and the *Snowy Range* to the left.

1007 M. **Livingston** (4485 ft.; *Park*, $3, R. from $1; *Albemarle*, R. from 75 c.), a city of 2778 inhab., finely situated at the foot of the *Big Belt* and *Snowy Ranges*, is the junction of the branch-railway to Gardiner, the station for the *Yellowstone Park* (see p. 447). It is a good centre for shooting (elk, deer, antelope, bear, grouse, geese, ducks) and fishing (trout, grayling).

The train now crosses and leaves the Yellowstone, which we have followed for 340 M. The line mounts rapidly (116 ft. per mile) to the *Bozeman Tunnel*, 1170 yds. long, which crosses the **Big Belt Mts.**, an outlying range of the Rocky Mts., at a height of 5570 ft. Beyond the tunnel we descend through the wild **Rocky Canyon* into the wide valley of the *Gallatin*. — 1032 M. *Bozeman* (4750 ft.; Hotel Bozeman, $3), a busy city of 3419 inhab., on the *East Gallatin*. Large coal-fields lie close by, and deposits of gold, silver, iron, and copper are worked. — At (1057 M.) *Logan* (4100 ft.) the line forks, the right or main branch running viâ Helena and the left branch viâ Butte. The two lines reunite at Garrison (p. 442).

The line from Logan to (71 M.) *Butte* runs through a district of great scenic beauty. — **Butte** (5700 ft.; *Thornton*, R. from $1½; *Finlen*, R. from $1½; *Butte*, R. from $1), founded in 1864, contains (1900) 30,470 inhab. (with the contiguous settlements, 50-60,000) and is probably the chief mining city in the country. It is the seat of the great *Anaconda Copper and Silver Mine* (sold in 1898 for $45,000,000) and other gold, silver, and copper mining companies, producing ore to the annual value of at least $25,000,000 (5,000,000*l.*). The annual output of copper is now about 250 million pounds. A visit to one of the chief mines is very interesting (introduction desirable and in some cases necessary). — The smelting works at *Anaconda* (Montana Hotel, from $3½), 25 M. to the W., are said to be the largest in the world. They have a concrete chimney 350 ft. in height. The public fountain throws a jet 220 ft. high. — The line from Butte to (52 M.) *Garrison* (see p. 442) runs through the picturesque *Deer Lodge Valley* passing (40 M.) *Deer Lodge City* (4545 ft.; 1324 inhab.).

Beyond Logan the main line soon reaches (1060 M.) *Gallatin* (4030 ft.), the station for *Three Forks*, at the confluence of the *Madison*, *Jefferson*, and *Gallatin*, which unite to form the *Missouri*. Farther on we thread a wild canyon, with the Missouri to the left and precipitous walls of rock to the right. 1126 M. *Prickly Pear Junction*.

1130 M. **Helena** (3930 ft.; *Helena*, *Grandon*, R. from $1; hotel at Broadwater, see p. 442), the capital of Montana, is a mining city of 10,770 inhab., finely situated in the fertile *Prickly Pear Valley*, near the E. base of the Rocky Mts. The *State House* and some of the other official and commercial buildings are large and substantial, and the streets are lighted by electricity and traversed by electric tramways. In the State House grounds is an equestrian statue

of *Gen. T. F. Meagher* (1823-67). A visit to the *U. S. Assay Office* is interesting.

Helena lies in the heart of one of the richest mining districts in the country and claims to be among the wealthiest cities of its size in the world. It is said that gold to the value of at least $ 40,000,000 has been taken from the *Last Chance Gulch*, which runs through the city; and all round the city are valuable gold and silver bearing veins of quartz, besides deposits of copper, iron, and galena.

About 3 M. to the W. of Helena (reached by electric tramway; fare 10 c.) is the *Broadwater Natatorium* (400 ft. long and 150 ft. wide; adm. free), fed by a hot spring, the temperature of which at its source is about 160° (in bath about 100°). The waters are good for rheumatism. Adjacent is the **Broadwater Hotel* (R. from $ 1½). — A visit to one of the *Gold* or *Silver Mines* in the vicinity is of great interest. The nearest are those at *Grizzly Gulch*, 4 M. to the S.W. The *Drum-Lummon Mine*, 20 M. to the N., has yielded $ 2,000,000 worth of gold and silver in a single year. — A steamer trip may be made through the *Canyon of the Missouri*.

Helena is also a station on the Great Northern Railway (see R. 70) and a pleasant excursion may be made by taking the Montana Central Division of this line to (98 M.) *Great Falls* (p. 435).

About 21 M. beyond Helena we cross the main ridge of the **Rocky Mts.** by *Mullan's Pass*, where the train passes through a tunnel ⅔ M. long and 5545 ft. above sea-level (summit of mountain over tunnel 5870 ft.). This is from 1800 to 2700 ft. lower than the passes of the Santa Fé and Union Pacific Railroads (comp. pp. 479, 460). The contrast between the E. and the W. sides of the 'Great Divide' is very striking, as we at once pass from a scene of wild rocky grandeur to one of mild pastoral beauty. The line descends rapidly to the valley of the *Little Blackfoot River*. At (1181 M.) *Garrison* (4315 ft.), on the *Deer Lodge River*, we are joined by the line from *Butte* (see p. 441). Beyond Garrison we skirt the Deer Lodge River, which soon changes its name to *Hell Gate River*. The fine snow-clad pyramid of *Mt. Powell* (13,400 ft.) is seen to the left. Near (1189 M.) *Gold Creek* the last spike of the Northern Pacific Railroad was driven in 1883, the tracks advancing from the E. and the W. meeting here. Below (1214 M.) *Bearmouth* (3790 ft.) we pass into *Hell Gate Canyon*, a picturesque valley, 2-3 M. wide. At (1248 M.) *Bonner* the Hell Gate River is joined by the *Big Blackfoot River* (right), which we cross beyond the station. — 1255 M. **Missoula** (3195 ft.; *Florence*, $ 3-4; *Rankin*, R. from 75 c.), finely situated on the *Hell Gate* or *Missoula River*, near its confluence with the *Bitter Root River*, is a rising city of 4366 inhab. and the junction of the Bitter Root Valley branch. *Fort Missoula* lies 4 M. to the S.

Hamilton (Hotel Ravalli, $ 3-4), on the Bitter Root line, 47 M. to the S., is a pleasant stopping-place, with big game and good fishing.

At (1261 M.) *De Smet* the railway forks, our line keeping to the right, while the Coeur d'Alène branch diverges to the left.

The Coeur d'Alène Line runs, through grand mountain scenery, into the heart of a famous mining district (lead and silver). At (308 M.) *Harrison* it reaches the lovely *Coeur d'Alène Lake*, which may be crossed to *Coeur d'Alène City* (p. 443).

Beyond De Smet we cross the *Marent Gulch* by a steel-trestle 226 ft. high. We then follow the *Jocko River* and traverse the *Reservation of the Flathead Indians*, a peaceful tribe whose boast is that they never killed a white man; their huts and 'teepees' are seen on both sides of the railway. The Agency Buildings are visible at the foot of the *Mission Range*, 5 M. to the E. The Reservation includes a large enclosure for the preservation of the bison. Near (1299 M.) *Jocko* the Jocko joins the *Flathead* or *Pend d'Oreille*, which we now follow. Beyond (1313 M.) *Perma* (2490 ft.) we cross the river by a truss-bridge. About 8 M. farther on the Pend d'Oreille is joined by the Missoula, and the combined rivers take the name of the *Clark Fork of the Columbia*. The valley here is narrow and rocky, but at (1325 M.) *Paradise* and (1332 M.) *Plains* (2460 ft.) it widens into two pleasant little plains, formerly used by the Indians as wintering-places for their ponies. The white *Coeur d'Alène Mts.* rise to the left and the *Cabinet Mts.* to the E. 1357 M. *Thompson's Falls* (2435 ft.), at the falls of the Clark Fork River. Picturesque scenery. Numerous bridges and cuttings. At (1380 M.) *Trout Creek* we change from 'Mountain' to 'Pacific' time (1 hr. slower; comp. p. xiv). Near (1405 M.) *Heron* (2260 ft.) we enter *Idaho* ('Gem of the Mountains'), a mountainous state, the N. tip of which we now traverse. We cross the river and skirt the N. bank of its expansion, **Lake Pend d'Oreille*, a beautiful sheet of water 45-50 M. long and 3-15 M. wide. 1428 M. *Hope* (2110 ft.), on the N. bank of the lake. At (1444 M.) *Sand Point* (p. 436) we cross an arm of the lake and then quit it. The scenery retains its wild character for several miles and then we cross vast plains hemmed in by hills as far as Spokane. The line runs towards the S. as far as (1486 M.) *Rathdrum* (2210 ft.). 1492 M. *Hauser Junction*, for a line to (14 M.) *Coeur d'Alène City* (p. 442). — We now enter *Washington* ('Evergreen State'), an important agricultural state, also remarkable for the splendid timber of its W. slopes. Beyond (1497 M.) *Otis* we cross the *Spokane River*.

1513 M. **Spokane** (pron. Spokán; 1910 ft.; *Spokane Hotel, Victoria*, R. from $1; *Halliday*, R. from 75 c.; **Davenport's Café*), a thriving city of 36,848 inhab., settled in 1878 and in great part rebuilt since a fire in 1889, lies on both banks of the Spokane River, in the centre of a district of great agricultural richness.

The two **Falls*, both within the city, are 150 ft. in total height and furnish the water-power for numerous manufactories, for the electric lighting of the town, and for its system of cable and electric tramways. Visitors should descend to the foot of the lower falls and should also go to the bridge above the upper falls. Among the most conspicuous buildings, many of which are of extraordinary size and solidity for so small and young a city, are the *Opera House* (2000 seats), the *Court House*, and the *City Hall*. The residence-quarter, on the hill above the railway (on the opposite side from the business-quarter), contains many houses of unusually good taste.

The *High School*, in this quarter, is a handsome red building, with a tower. A fine *View of the city and valley is obtained from the *Cliff Heights* (reached by cable-cars and steam-tramway).

From Spokane to Umatilla, 262 M., *Oregon Railroad & Navigation Co.* in 9 hrs. — Chief stations: 50 M. *Tekoa;* 105 M. *Winona;* 157 M. *Starbuck;* 204 M. *Walla Walla* (10,049 inhab.); 235 M. *Wallula* (see below). At (262 M.) *Umatilla* we join the route described at p. 468.

The line now runs to the S.W. — 1522 M. *Marshall Junction.*

From Marshall Junction to Lewiston, 138 M., railway in 6½ hrs. This line runs through the fertile *Palouse District.* — From (126 M.) *Joseph* a branch-line runs to (12 M.) *Cul-de-Sac* and (35 M.) *Voltmer.* — 138 M. *Lewiston*, at the junction of the *Snake* and *Clearwater* rivers. Lewiston, which is in Idaho, is connected by a bridge across the Snake with *Clarkston*, in Washington.

[From Lewiston a branch-line runs through the fertile lands of the ormer *Nez Percé Reservation* to (72 M.) *Kooskia*, on the *Upper Clearwater*, and 75 M.) *Stites.*]

From (1529 M.) *Cheney* (2340 ft.) a line runs to (124 M.) *Coulee City*, passing (10 M.) *Medical Lake*, a favourite invalid resort. — Beyond (1554 M.) *Sprague* (1910 ft.) we pass *Colville Lake* (left). We now traverse an elevated pasturage-district.

1658 M. *Pasco*, near the confluence of the *Columbia* and *Snake Rivers*, is the junction of the line into the Walla-Walla country.

This line crosses the Snake River by a long iron bridge and joins the Oregon R.R. and Nav. Co. at (16 M.) *Wallula Junction* (see above). Following this line for 27 M. more, we reach *Umatilla.* Thence to (187 M.) *Portland*, see R. 74.

Pasco is also the junction of the *Spokane, Portland, & Seattle Railway*, running along the N. bank of the Columbia to (145 M.) *Lyle*, (221 M.) *Vancouver* (Washington; p. 503), and (231 M.) *Portland* (p. 506).

Our line crosses the Columbia and follows the valley of the *Yakima* (river to the right) towards the N.W. Beyond (1698 M.) *Prosser* we traverse the *Yakima Indian Reservation.* The white cap of *Mt. Adams* (12,470 ft.), one of the loftiest of the Cascade Mts. (see below), is seen to the left. — 1747 M. *North Yakima* (990 ft.), with 3154 inhab., is the entrepôt of the *Yakima Basin*, a district in which large quantities of fruit, vegetables, hops, alfalfa, and tobacco are grown by dint of irrigation. We now cross the river and have it to our left. Farther on we pass through the fine **Yakima Canyon* (30 M. long) and enter the *Kittitas Basin*, another fertile valley, bounded on the W. by the green *Cascade Mts.*, with the white peak of *Mt. Rainier* or *Tacoma* (p. 446) rising beyond. 1784 M. *Ellensburg* (1510 ft.), with saw-mills and machine-shops. At (1822 M.) *Easton* the train begins to ascend the E. slope of the Cascade Mts. (see below) at a gradient of 116 ft. per mile. Fine views. The crest is penetrated by the *Stampede Tunnel* (2810 ft.; height of summit above the tunnel 3980 ft.), nearly 2 M. long.

The Cascade Mts. (a continuation of the Sierra Nevada; see p. 464) are a broad volcanic plateau, with many snow-peaks (9000-14,500 ft.; average height 6000 ft.), running through Washington and Oregon from N. to S. and dividing these states into two regions differing widely in climate, surface, and vegetation. The region we now enter on the W. slope has a mild, moist climate (not unlike that of England), and is covered with dense forests, mainly of coniferous trees.

We now descend into the beautiful valley of the *Green River*, passing round winding curves and through tunnels, with numerous picturesque glimpses. 1849 M. *Hot Springs* (*Hotel Kloeber), a small health-resort. — 1869 M. *Palmer Junction.*

From Palmer Junction a branch-line, formerly followed by the through trains, runs to (43 M.) *Tacoma* through the valleys of the *White River* and the *Puyallup* (Poo-állup). Frequent *Views of Mt. Rainier are obtained. It rejoins the main line at (35 M.) *Meeker* (see below).

From Palmer the main line goes by the 'Palmer Cut-off' to (1890 M.) *Auburn*, whence most of the through-trains run to the N. to (1911 M.) Seattle (p. 437), one of the W. termini of the N. P. Railway. Passengers for Tacoma and Portland usually change carriages at Auburn, but in some cases retain their seats and are carried up to Seattle, back to Auburn, and so to their destination.

The line for Tacoma and Portland runs to the S. (left) from Auburn. 1897 M. *Sumner;* 1899 M. *Meeker.*

1901 M. **Puyallup** (70 ft.; *Puyallup*, $ 1-3), with 1884 inhab., is the centre of a rich hop-district, with numerous drying-kilns (very unlike the 'cowls' of Kent). It is also the headquarters of the *Puyallup Indian Reservation.* Expert hop-pickers, many of whom are Indians, can earn $ 1½-2 (6-8*s.*) per day (compared with 3-4*s.* in England).

1907 M. **Tacoma.** — Hotel Tacoma, R. from $ 1; Donnelly, R. from $ 1; Bonneville, $ 4-5. — A line of Electric Tramways connects the *Railway Station*, at the end of *Pacific Avenue*, the main business-street, with the *Wharf;* and numerous other electric lines run to the suburbs, *Point Defiance Park*, *Puyallup* (see above), etc. — *British Vice-Consul.* — *German Vice-Consul*, Mr. O. Richter.

Tacoma (30 ft.), an industrial city and seaport of (1900) 37,714 inhab. (now probably doubled) and the W. headquarters of the N. Pacific Railway, is finely situated on a series of terraces rising from the head of *Commencement Bay*, the S.E. arm of *Puget Sound* (p. 674). It commands fine views of the Sound, the Cascade Mts., and the grand white cone of Mt. Rainier (S.E.; see p. 446). Though only 30 years old (300 inhab. in 1875, 760 in 1880), Tacoma possesses numerous substantial streets and buildings. Its industrial establishments include large saw-mills (total annual value of products $ 5,000,000), furniture factories, foundries, smelting works, railway workshops, iron and stove works, breweries, flour-mills, etc.; and it carries on an extensive trade in grain, lumber (150,000,000 ft.), coal, tea, silk, and other articles. Among the principal buildings are the *Court House*, the *City Hall*, the *Opera House*, the *Carnegie Library*, the *Offices of the N. Pacific Railway*, various *Churches*, the *High School*, and the *Annie Wright Seminary.* In the Court House is housed the *Ferry Museum*, which contains an interesting collection of Indian baskets, domestic utensils, canoes, and implements of hunting and war, as well as casts, prints, and armour (open daily, 2-5; on Thurs. & Sun. 10 c., other days 25 c.). In front of the Hotel Tacoma is a *Totem Pole* (p. 679). The *University of Puget Sound* and *Whitworth College* have each about 400 students.

Many good roads and bicycle-paths lead from Tacoma to the so-called *Natural Parks*, beginning 6 M. to the S. of the city and extending thence for about 15 M., with a width of 10 M. This large area, in spring thickly carpeted with flowers, is dotted with trees and lakes, the largest of the latter being the *American Lake*, 5 M. long and 2 M. wide, offering good boating and fishing. A joint camp of Regular and National Guard troops is held here biennially (1908, 1910, etc.). The Parks are excellent driving places, as there is no dust in summer and no mud in winter.

Tacoma is the starting-point of steamers to *Seattle* (p. 437), *Port Townsend* (p. 674), *Olympia* (see below), *Victoria* (p. 674), and other points in Puget Sound; to *San Francisco* (p. 509) and other Californian ports; to China and Japan, Honolulu, European ports, etc. — Tacoma is connected with *Seattle* (p. 437) by the Northern Pacific Railway (41 M., in 1½ hr.) and by the Interurban Electric Railway (36 M., in 1½ hr.).

A visit to *Mt. Rainier or Tacoma (14,529 ft.) takes about 3 days. The train is taken to (32 M.) *Wilkeson*, whence a bridle-path leads to (25 M.) a point about 7000 ft. above the sea, where a good view is obtained of two of the 14 living glaciers on the mountain. The hazardous ascent thence to the summit should not be attempted except by experts. Mt. Rainier, like the other isolated mountains of the Cascade Range, is an extinct volcano; and the two craters at the summit still give off heat and sulphurous fumes. Mountain-goats, marmots, and ptarmigan are among its fauna. Inquiry as to guides and horses should be made at Tacoma. — Another and perhaps finer trip may be made to *Paradise Park (5500 ft.), on the S. side of Mt. Rainier. Trains run twice a day on the *Tacoma Eastern R. R.* from Tacoma to (55 M.) *Ashford*, whence stages ply regularly to (12 M.) *Longmire's Springs* (2850 ft.; National Park Inn, from $ 2¾; Longmire Hotel), at the foot of the mountain. Most travellers prefer to spend the night here, though it is possible to proceed the same evening as far as the snow-line at *Paradise Valley*. A road leads from Longmire's Springs through Paradise Park to the (7 M.) *Camp of the Clouds* (6000 ft.; Hotel Tent, meals and blankets $ 2). The Alpine flora of the Park is very fine. Close by is **Nisqually Glacier*, 7 M. long, the finest to the S. of Alaska; and many other glaciers and cascades may be reached within a day's walk. The ascent of Mt. Rainier from this side, viâ *Gibraltar* and *Camp Muir*, is much easier (2 days). — Other good opportunities for the climber are afforded by the ten jagged peaks of the *Tatoosh Range* (ca. 7000 ft.).

On the N. side of Mt. Rainier a large flume and reservoir have been constructed in connection with the *Puyallup River* for the purpose of using the overflow of the glaciers to generate electric power for the cities on Puget Sound.

From Tacoma to Olympia, 32 M., *Northern Pacific Railway* in 1½ hr. Some of the Portland trains run by this route, joining the route described below at (66 M.) *Centralia*. — Olympia (*Olympia*, from $ 2), the capital of the State of Washington, is finely situated at the head of Puget Sound, in the midst of a thickly wooded district. Pop. (1900) 3863. It carries on a trade in agricultural produce, fruit, wool, and timber.

The Pacific Division of the Northern Pacific Railway runs to the S. from Tacoma to Portland. Fine views of Mt. Rainier or Tacoma (40 M. distant) are obtained to the left, through breaks in the forest. 1916 M. *Lake View* (325 ft.) is the point of divergence of the above-mentioned line to Olympia. 1941 M. *Tenino* (315 ft.), the junction of another line to Olympia. — 1958 M. *Centralia* (205 ft.; 1947 inhab.; see above) is the junction of a line to (85 M.) *Moclips* (Beach Hotel, etc.), a popular sea-bathing resort on the Pacific Ocean. 1962 M. *Chehalis*, the junction of a line to *South Bend*, on the Pacific Ocean. Farther on we descend along the *Cowlitz*, and glimpses of *Mt. Adams* (p. 444) are obtained to the left.

EAST BOSTON

Wagner & Debes' Geog. Estab. Leipzig.
Livingston
Clarks Fork Mines
Jackson Hole
Buffalo Plateau
Yellowstone River
Third Canon
Gardiner
Electric Peak 11155
Sepulchre Mt. 9500
Mt. Everts 7900
Joseph Pk.
Le Quadr.
Gray Pk.
Quadrant Mt. 10125
Bells or Bannock Pk. 10330
Antler Pk.
3 River Pk.
The Dome
Mt. Holmes 10528
Christmas Tree Park
The Crags
Willow Park
Horse Shoe Hill
Obsidian Cliffs
Roaring
Prospect Pk.
Folsom Pk.
Storm Pk.
Tower Cr.
Garnet Hill
Crescent Hill
Junction Butte
Specimen Ridge
Amethyst Mt. 9423
Mt. Washburn 10345
Dunraven Pk. 8865
Mirror
Bison Pk. 9036
Druid Pk.
Baronette Pk.
Abjathar Pk.
The Thunderer
Mt. Norris 10019
The Needles
Death Gulch
Mt. Hancock 10100
Snake River
Ocean Plateau
Lamar River
Absaroka
Gallatin
Grassy Lakes
Birch Hills
Hering L.
Beula L.
Moose Falls
Hot Sprs.
Falls
Crooked Cr.
Falcon Cr.
Lynx Cr.
Phlox Cr.
Cliff Cr.
Escarpment Cr.
Calfee Cr.
Cache Cr.
Deep Creek
Slough Creek
Lewis R.
Spirea Cr.
Forest Cr.
Bastn Cr.
Mountain Ash Cr.
Loon L.
Bridger L.
Fossil Forest
Petrified Forests
Amethyst Cr.
Rose Cr.
Trout L.
Soda Butte
Cabin Hot Sprs.
Meridian Pk.
Elk Tongue
Pebble Cr.
Amphitheatre Cr.
Hell Roaring Cr.
Crevice Gulch
Mines
Eagle Cr.
Bear Gulch
Sheep Mt.
Entrance Gate
Gardiner R.
Mammoth Hot Sprs.
Terrace Mt.
Bunsen Pk.
Middle Gardiner Falls
Osprey Cliffs
Wraith Falls
Lava Cr.
Lupine Cr.
Blacktail Deer Cr.
Geode Cr.
Rescue Cr.
Yancey's Nymph
Lost Cr.
Tower Falls
Underclift Sprs.
Agate Cr.
Burnt Cr.
Opal Cr.
Hot Sprs.
Carnelian Cr.
Antelope Cr.
Heart Cr.
Crooked Cr.
Falls
Fox Cr.
Harebell Cr.
Coulter Cr.
Falls
Spirea Cr.
Canon Gen.
Moose Falls
Hot Sprs.
Falls
Rainbow Falls
Terraced Falls
Mountain Ash Cr.
Union Falls
Winter Cr.
Grizzly L.
Beaver L.
Obsidian Cr.
Obsidian L.
Rosa L.
Gallatin R.
Crowfoot Ridge
Gallatin R.
Bighorn Pass
Arvid Pass
Gardiner River
Fawn Pass
The Pocket
Bals L.
Fan Cr.
Sportsman L.
Cinnabar Cr.
Reese Cr.
Northern Pacific R.R.
Lamar River
Soda Butte Cr.
Amphitheatre Cr.
Pebble Cr.
Elk Cr.
Tongue
Meridian Pk.
Clarks Fork Mines
Jackson Hole
0 1 2 4 6 8 10 12
1 : 520 000
0 1 2 4 8 12 16 20

At (2012 M.) *Kalama* (33 ft.) the train is transferred across the wide *Columbia River* by a large steamer. 2013 M. *Goble*, the junction of a line down the Columbia river to *Astoria* (p. 508), *Seaside* (p. 508), and (80 M.) *Holladay*. Beyond (2029 M.) *Warren* we skirt the *Willâmette* (p. 506). In clear weather views are had of *Mt. St. Helens* (9750 ft.; to the N.E.), *Mt. Hood* (11,225 ft.), and *Mt. Jefferson* (10,567 ft.; to the S.E., more distant).

2052 M. **Portland**, see p. 506.

72. The Yellowstone National Park.

The **Yellowstone National Park, which, by Act of Congress on March 1st, 1872, was set apart as a public park or pleasure-ground 'for the benefit and enjoyment of the people', consists of a tract 62 M. long from N. to S. and 54 M. wide from E. to W., with an area of 3348 sq. M. To the S., E., & N. of it lies the *Yellowstone Forest Reserve* of 13,070 sq. M., and to the W. is the *Madison Reserve* of 1270 sq. M., both belonging to the Federal Government but neither under control of the Park officials. The great bulk of the Park lies in *Wyoming*, but small portions of it are in *Montana* (N.) and *Idaho* (W.). The central portion of the Park consists of a broad volcanic plateau, with an average elevation of 8000 ft. above sea-level. Surrounding this on all sides are mountains with peaks and ridges rising 2000-4000 ft. above the general level. To the S. are the grand *Teton* and *Wind River Ranges;* to the E. the *Absaroka Range*. To the N.E. a confused mass of mountains unites the Absarokas with the *Snowy Range*, which shuts in the Park on the N. The beautiful *Gallatin Range*, on the N. and N.W., lies partly within the national reservation. The whole district has been the scene of remarkable volcanic activity at a comparatively late geological epoch; and the traces of this activity, in the form of geysers, boiling springs, terrace and crater formations, cliffs of obsidian, deeply-cleft canyons, petrified trees, sulphur hills, and the like, are of the strangest and most startling description (see p. 448). Its geysers are the largest in the world, excelling those of New Zealand or Iceland. Its lakes and waterfalls are also fine, and the marvellously coloured Canyon of the Yellowstone (p. 458) perhaps outstrips even the geysers as an attraction. A great part of the ground is covered with dense forests of lodge-pole pine and Douglas spruce. The Park has become a huge game-preserve, and large numbers of wild animals, including the last free herd of buffaloes in America, elk, deer, antelope, bears, big-horn sheep, etc., are sheltered in its recesses. These free wild animals are a notable attraction to the tourist. No shooting is allowed within the Park; but fishing is freely allowed, and excellent sport (chiefly trout and grayling) may be obtained in the Yellowstone River, the Yellowstone Lake, and in nearly all the streams. The botanist will find much to interest him in the flora of the district, and it need scarcely be said that it is a peculiarly happy hunting-ground for the geologist. — The Park is under the exclusive control of the Secretary of the Interior, except in regard to improvement work, which falls to the Secretary of War. Troops of U. S. cavalry are stationed at many points to protect the natural curiosities. The rules of the Park may be seen at the hotels, and any infringement of them is severely dealt with. — This whole region was made known to the public by the Washburn Expedition of 1870, but the fur-traders, trappers, and hunters had brought home tales of its wonders as far back as 1830. Since 1870 the U. S. Government has sent various scientific topographical and geological expeditions into the Yellowstone, which has now been pretty thoroughly explored and mapped (comp. p. 450).

Geology of the Yellowstone Park (by *Arnold Hague*, U.S. Geological Survey). Geological evidence shows that the processes of mountain building were contemporaneous in all these ranges and took place near the close

of Cretaceous time. By the upheaval of the mountains a depressed basin was formed, everywhere shut in by high land. Later, the pouring out of vast masses of lavas converted this depressed region into the Park plateau. Tertiary time was marked by great volcanic activity, lavas being piled up until the accumulated mass measured more than 2000 ft. in thickness. At least two centres of volcanic eruptions, Mt. Washburn and Mt. Sheridan, are known within this area. The plateau built up of these lavas embraces an area of 50 by 40 M., the volcanic flows resting against the steep spurs of the encircling mountains. Strictly speaking it is not a plateau; at least it is by no means a level region, but presents an undulating country characterized by bold escarpments and abrupt edges of mesa-like ridges. It is accidented by shallow basins of varied outline and scored by deep canyons and gorges. Evidences of fresh lava flows within recent times are wholly wanting; nevertheless, over the Park plateau the most unmistakable evidence of underground heat is everywhere to be seen in the waters of innumerable hot springs, geysers, and solfataras. A careful study of all the phenomena leads to the theory that the cause of the high temperatures of these waters is to be found in the heated rocks below and that the origin of the heat is in some way associated with the source of volcanic energy. Surface waters, in percolating downward, have become heated by relatively small quantities of steam rising through fissures in the rocks from much greater depths. Geysers and hot springs return these meteoric waters to the surface. They are in a sense volcanic phenomena and remain as evidence of the gradual dying out of volcanic energy. If this theory is correct, proof of the long continued action of thermal waters upon the rocks should be apparent, as they must have been active forces ever since the cessation of volcanic eruptions. Ascending currents of steam and acid waters have acted as powerful agents in rock decomposition and have left an ineffaceable impression upon the surface of the country. This is shown by numerous areas of altered lavas and extinct solfataras. No finer example of the action of steam upon lavas can be seen than along the walls of the Yellowstone Canyon. To-day the greatest activity is found in the geyser basins. The number of hot springs in the Park exceeds 4000. If to these be added the fissures and fumaroles from which issue large volumes of steam and acid vapours, the number of active vents would be greatly increased. There are about 100 geysers in the Park. Between a geyser and a hot spring no sharp line can be drawn, although a geyser may be defined as a hot spring throwing with intermittent action a column of hot water and steam into the air. A hot spring may boil incessantly without violent eruptive energy; a geyser may lie dormant for years without explosive action and again break forth with renewed force.

Bunsen's theory of geyser action, which he announced after investigating the geysers of Iceland, is undoubtedly correct in its essential principles, and has stood the test of careful study of the varied hydro-thermal phenomena in the Yellowstone Park, where they occur on so grand a scale. In the latter locality it may be shown that it is not necessary that the geyser conduit should be vertical or even straight. Bunsen's theory rests on the well-known principle that the boiling point of water increases with pressure and consequently the boiling point at the bottom of a long tube is much higher than at the top. When heat is applied to the bottom of a deep reservoir, explosive action is likely to follow, and in the case of a geyser the expansive force of steam which is generated drives out violently the water in the tube which leads to the surface.

The thermal waters of the Park may be classed under three heads: 1st, calcareous waters carrying calcium carbonate in solution; 2nd, silicious waters carrying free acid in solution; 3rd silicious alkaline waters rich in silica. Calcareous waters are confined almost exclusively to the Mammoth Hot Springs, which lie just to the N. of the Park plateau. Although the waters break out in close proximity to the lavas, and undoubtedly receive their heat from volcanic sources, they reach the surface through limestones. With a few exceptions silicious waters are found issuing from the lavas from which they derive their mineral contents.

Acid waters may be recognized by efflorescent deposits of alum and soluble salts of iron, and frequently by the presence of delicate sulphur crystals. Alkaline springs present more of general interest than acid waters, as it is only in connection with the former that geysers occur. They are the principal waters of all the geyser basins and most hot spring areas. They deposit mainly an amorphous silicious sinter, but in an endless variety of forms, as is shown in the geyser cones and incrustations on the surface and edges of hot pools.

It is these unrivalled hydro-thermal manifestations and their varied phenomena that have made the Yellowstone Park famous throughout the world, and gained for it the distinction of America's Wonderland.

Approaches and Plans of Tour. The season for visiting the Yellowstone Park lasts from June 10th to Sept. 15th, and June and September are less crowded than July and August. Hitherto the principal approach has been viâ *Livingston* on the *Northern Pacific Railway* (see p. 450 and R. 71). The charge for a round trip ticket from Livingston, including railway between Livingston and Gardiner (each way), stage-fare for the regular tour in the Park, and board and lodging at the Park hotels (for 5½ days) is $ 55.00 (from Mammoth Hot Springs $ 47.50). A return-ticket from St. Paul, Minneapolis, or Duluth to Mammoth Hot Springs costs $ 34.50, and includes only railway and stage fares; the return-fare, including the trip through the Park, is $ 84.50. The roads throughout the Park are kept up by the U.S. Government at great expense, and they are regularly watered to keep the dust down as far as possible. Some of the drives, however, are rather tedious, as the regular coaches make only 6 M. an hour on an average, and lighter vehicles 7 M. The transportation from Gardiner is in the hands of the *Yellowstone Park ransportation Company*, whose coaches are roomy and strong. Tourists of simple tastes may put themselves in the hands of the *Wylie Permanent Camp Co.* (Gardiner, Montana), which has erected comfortable camps (tents) in different parts of the Park, and charges $ 40 for the round trip from Gardiner, including six days' board (two nights spent at the Upper Basin). Each additional day costs $ 3, and this is also the charge for cyclists and those tourists who have their own vehicles. Carriages may be hired at $ 10-15 per day (3-11 pers.); saddle-horses $ 3½ per day. The Raymond & Whitcomb Co. (p. xxii) conducts parties from the larger towns to the Yellowstone at rates proportional to those above mentioned, while similar parties are brought by the Pennsylvania R. R. from New York, by the Burlington Route from Chicago, etc. Camping parties may secure a complete outfit, guides, etc., at the Mammoth Hot Springs Hotel (p. 450). — The Yellowstone may also be approached on the W. from *Yellowstone*, on the *Oregon Short Line R. R.* (p. 467), whence passenger enter the Park on the coaches of the *Monida & Yellowstone Stage Co.*, stopping first at the (19 M.) *Lower Geyser Basin*. These coaches also make the regulation circular tours like that above mentioned (fare $ 46.75). The Wylie Camp Co. also operates from the W. entrance (6 days; $ 40). Arrangements have been made by which the tourist may enter the Park from Gardiner and quit it by Yellowstone (and vice versâ). The charge for a return-ticket from Omaha (p. 418) or Kansas City (p. 423), including the trip through the Park from Yellowstone, is $ 78.25, from Portland (p. 506), $ 85, from Salt Lake City (p. 499), $ 55. — From the E. the Yellowstone Park may be reached from *Cody* (p. 422), the nearest railway-station in this direction (about 94 M. from the Lake Outlet, near the Lake Hotel, p. 456). This route, however, is used only by camping parties. — *Warm Wraps* are necessary in the Yellowstone, as, however strong the sun is by day, the nights are apt to be very chilly. — In 1908 the Park was visited by 19,542 tourists.

Hotels. The hotels of the *Yellowstone Park Association* (headquarters at Mammoth Hot Springs) are comfortable and well managed. The uniform charge is $ 5 a day for the first week, then $ 4.50. The Association also owns lunch-stations at Norris and at the Thumb of Yellowstone Lake.

Guides. Men to point out the way to the various points of interest may be obtained at the hotels for a moderate fee; but really intelligent

and efficient guides are still a desideratum. Mounted guide, for longer excursions, $5 per day.

Bibliography. The most detailed account of the Yellowstone is that of Prof. F. V. Hayden and his colleagues in the *Twelfth Annual U. S. Geological Report* (1878), but the work likely to be of most use to the tourist is *Hiram M. Chittenden's* 'Yellowstone National Park' (new ed., 1903; $1.50). See also *Arnold Hague's* 'Geological History of the Yellowstone Park' (1887). A small *Guide to the Yellowstone Park*, by *A. B. Guptill* (25 c.), may be bought at the hotels. Good *Photographs*, by F. Jay Haynes, are also on sale.

a. From Livingston to Mammoth Hot Springs.

Northern Pacific Railway to (54 M.) *Gardiner* in 2½ hrs. Stage thence to (5 M.) *Mammoth Hot Springs* in 1 hr.

Livingston, see p. 441. — The train ascends the valley of the Yellowstone and soon passes through (3 M.) the **First Canyon of the Yellowstone* or *Gate of the Mts.*, a gorge about 1 M. long, with rocky walls 2000 ft. high. The wider reach then entered is known as *Paradise Valley*. 31 M. *Dailey's* (4915 ft.). To the left is *Emigrant Peak* (10,960 ft.), at the head of Paradise Valley. Near (41 M.) *Sphinx* (5070 ft.) we thread the fine **Middle* or *Yankee Jim Canyon*, 'a gigantic and perfect piece of ice-work, with rocky sides smoothly polished and striated from the bottom to the top' *(Geikie)*. As we approach the end of the railway, we see *Cinnabar Mt.* to the right, with the curious **Devil's Slide*, consisting of two dykes of hard sandstone, 30 ft. apart, ascending the mountain for about 2000 ft.

54 M. **Gardiner** (5400 ft.; *Wylie Company's Hotel*, comp. p. 449), the terminus of the railway and the beginning of the stage-line, lies at the confluence of the Yellowstone and the *Gardiner River*, where it enters the Yellowstone Park. Opposite the tasteful rustic railway station is a massive arch of rough basalt, 50 ft. high, with a tablet bearing the words: 'For the benefit and enjoyment of the People'. This is the entrance-gate to the Park. Beyond it the road ascends on the right bank of the Gardiner and after 3 M. crosses from Montana to *Wyoming* (p. 460). Between Gardiner and Mammoth Hot Springs the road ascends 800 ft., by a continuous and easy grade.

5 M. ***Mammoth Hot Springs Hotel*** (6215 ft.; 300 beds, incl. annex) is finely situated on a plateau about 800 ft. above the Gardiner, with *Mt. Everts* (7900 ft.) rising to the E. (beyond the river) and *Terrace Mt.* (8100 ft.) and *Bunsen Peak* (9100 ft.) to the S. Mammoth Hot Springs is the business and administrative centre of the Park, including the headquarters of the Superintendent, of the officers in charge of the improvement works and weather observations, and of the hotel and transportation companies. Adjacent is *Fort Yellowstone*, the military headquarters of the park.

This is the starting-point and the terminus of the circular tour round the Park, which may be made in either direction, though that followed below is the one followed by the stages of the Transportation Co. and is pre-

ferable, as reserving the fine Yellowstone Canyon to the last. Trunks and other heavy luggage are left here. The drive through the Park is made in coaches holding 8-11 people, and the same carriage is retained throughout by those who perform the circuit within the usual time (5½ days; fee to driver customary).

Stages (fare $ 1) leave the hotel daily at 2 p.m., for a circuit of the Terraces. A more satisfactory examination of the Terraces may be made on foot, under the conduct of the *Yellowstone Park Association Guide*, starting at about 2.30 p.m. It is, however, preferable to visit the Terraces, if possible, in the morning or late evening, since the heat reflected from the glaring white formations is very trying. A guide is not indispensable, as the hotel is scarcely lost sight of. Smoked glasses are a desirable protection to the eyes.

Opposite the hotel, on the slope of Terrace Mt., are the wonderful ***Formations** or **Terraces** formed by the calcareous deposits of the *Mammoth Hot Springs*. These deposits cover an area of nearly 200 acres, comprising 10-12 distinct terraces and 70 active springs, with a temperature varying from 65° to 165° Fahr. The main springs now active lie just above the Terraces, the total height of which is about 300 ft. The exquisite colouring of the formations (white, cream, salmon, red, brown, yellow, green, etc.), the singularly blue transparency of the water, and the striking arrangement of the terraces combine to form a scene that has no rival since the destruction of the famous Pink Terraces of New Zealand (1886).

The first objects to attract the visitor's attention on leaving the hotel are the cones of two extinct geysers, named *Liberty Cap* (52 ft. high) and the *Giant's Thumb*. The path usually followed in visiting the Formations diverges from the main road about 200 yds. to the S. of the former; the path near the Giant's Thumb is generally taken in returning. Among the chief points of interest are the *Minerva Terrace*, the *Jupiter Terrace*, the *Pulpit Terrace*, *Cupid's Cave*, the *Narrow Gauge Terrace*, the *Orange Geyser* (a hot spring, not a geyser proper), the *Devil's Kitchen*, *Cleopatra Terrace and Pools*, *Angel Terrace*, and *Hymen Terrace*.

Those who stay more than a day at the Mammoth Hot Springs may make several excursions, by carriage or in the saddle. The drive around *Bunsen Peak* is of special interest, going by °*Middle Gardiner Falls* (150 ft. high), in a canyon 500 ft. deep. This trip may be combined with the ascent of Bunsen Peak (half-a-day; °View). *Sepulchre Mt.* (9500 ft.) and *Electric Peak* (p. 452) may also be ascended on horseback. An ascent of *Mt. Everts* (p. 450), including a visit to the *East Gardiner* or *Undine Falls*, takes about a day.

The visit to Tower Falls is usually made at present as a side-trip from Mammoth Springs (22 M.; stage in ca. 4 hrs.). The road crosses the Middle Gardiner River by (1½ M.) a high steel-arched bridge and then ascends gradually to (12 M.) a high plateau. Thence it descends through *Crescent Hill Canyon* and turns to the right (E.). After 5 M. we pass the road leading to the left to Baronette Bridge, over the Yellowstone (see p. 458), and to (12 M.) the *Buffalo Farm* in Lamar Valley.

b. From Mammoth Hot Springs to the Lower Geyser Basin.

40 M. Stage in about 10 hrs., including 2 hrs. at Norris.

The road ascends gradually to the S. up the N. slope of Terrace Mt. to (2¾ M.) the strange formation of white travertine rocks known as the *Hoodoos* and the *Silver Gate*, great blocks which rise

75 ft. on either side of the road, and to (3½ M.) the **Golden Gate*, where the W. branch of the Gardiner passes between Bunsen Peak and Terrace Mt. The name is said to be derived from the yellow moss which grows on the rocky walls of the pass. Fine retrospect. On issuing from the canyon, by a concrete viaduct of eleven arches, which carries the road for 225 ft. along the face of the cliff, we reach the picturesque *Rustic Falls* (60 ft.). Beyond we enter *Swan Lake Basin*, on the farther side of which is the first *Wylie Camp* (p. 449). To the right rise the snow-peaks of the *Gallatin Range*, including (from right to left) *Quadrant Mt.* (10,125 ft.), *Bannock Peak* (10,330 ft.), and *Mt. Holmes* (10,528 ft.). Behind us, to the N.W., is *Electric Peak* (11,155 ft.), the highest mountain in the Park. About 2 M. beyond Swan Lake we cross the middle fork of the Gardiner. Farther on, 6-7 M. from the Golden Gate, are *Willow Park* and *Apollinaris Spring*. To the left, 1½ M. farther on, rises the **Obsidian Cliff**, a ridge of volcanic glass, 300 yds. long and 150-250 ft. high, once a favourite resort of the Indians, who made arrow-heads of the obsidian. In the construction of the road the large blocks of obsidian were shattered by being first heated by fires and then douched with cold water. To the right lies *Beaver Lake* (7415 ft.), so called from the ancient beavers' dam (600 ft. long), now overgrown with vegetation. The road skirts the lake for about 1 M., crosses the *Green Creek*, and then surmounts the watershed (7550 ft.) between the Gardiner, flowing into the Yellowstone, and the *Gibbon*, flowing into the Madison. We pass *Roaring Mt.* (l.), the little *Twin Lakes* (r.), and the *Devil's Frying Pan* (r.).

About 20 M. from Mammoth Hot Springs is the small *Norris Hotel* (7527 ft.), where a halt is made for luncheon. It lies in the **Norris Geyser Basin**, which, though not to be compared with the larger basins described at pp. 453, 454, contains features of considerable interest. Some of its active geysers are of quite recent origin. Most visitors will see as much as they wish of this basin by walking on about 1 M. ahead of their carriage. A guide is provided free of charge by the hotel. In this way they may see a boiling spring to the left of the road; the *Hurricane* (right; sign-post); the *Constant Geyser*, in a large tract of geyserite which is unsafe for walking except on the board-walk, and the *Black Growler*, to the right.

A path diverging to the left leads to the *Bath Tub*, the *Emerald Pool*, the *Paint Pots*, the *New Crater*, the (¼ M.) *Monarch Geyser* (no longer active), and the *Minute Man*. — Numerous other small geysers and boiling springs are visible in various directions.

Beyond Norris Basin the road traverses (1¾ M.) *Elk Park*, and then follows the course of the *Gibbon River*, which forms here a series of rapids a mile long. About 3½ M. from Norris Hotel we enter a valley named *Gibbon Meadows*, passing (near the third mile-post) the two *Chocolate Springs*, one on each side of the river. About 1 M. farther on we descend the **Gibbon Canyon*.

About 1/2 M. to the E. (left) of the entrance to the canyon are the *Artists' Paint Pots*, similar to those described below. — A path to the right, 3/4 M. farther on, leads to the *Monument Geyser Basin*, 1000 ft. above the road, which may be neglected by the non-scientific tourist.

About 1 M. beyond the entrance of the canyon, to the right, is **Beryl Spring*, one of the loveliest boiling springs in the Park (15 ft. across). Near the end of the canyon, to the left, 3 1/2 M. farther on, are the **Gibbon Falls*, 80 ft. high. About 1 1/2 M. beyond Gibbon Falls is a Wylie Lunch Station, at the point of junction of our road with the N. branch of the *Yellowstone Road*, the W. approach (see p. 467). Farther on we descend gradually, across a somewhat uninteresting tract, to the valley of the *Firehole River*, reaching it at (4 3/4 M.) the point where our road is joined by the S. branch of the Monida road. The next part of our road, ascending along the Firehole River, is more interesting. In 3 1/2 M. we reach its junction with *Nez Percé Creek*, so named from the campaign of 1877, waged by General Howard against Chief Joseph of that tribe. About 1 1/2 M. farther on, beyond a flat plain, we come to —

40 M. ***Fountain Hotel** (7250 ft.), the usual halting-place for the first night after leaving Mammoth Springs. Hot mineral baths may be obtained at the hotel.

Every evening, at a point about 150 yds. behind the hotel, bears may be seen eating the kitchen garbage of the day. They are so inoffensive that, it is said, they would eat apples from the hands of the onlookers, if the Park rules allowed such feeding. A similar sight may be witnessed at all the hotels in the Park except that at Mammoth Hot Springs.

The ***Lower Geyser Basin**, which we have now reached, has an area of 12-13 sq. M. and a mean elevation of about 7250 ft. It is known to contain about 700 hot springs, besides a score or so of geysers, arranged in groups. Within a few hundred yards of the hotel is the ***Fountain Geyser**, which spouts every 2-4 hrs. Though not very high (30-50 ft.), the eruption of this geyser is so wide, has so many interlacing jets shooting in all directions, and rises and falls with so many variations, that it ranks among the most beautiful in the Park. The approach of an eruption, which lasts 15-20 min., is heralded by the gradual filling up of the crater. — About 50 ft. to the N. is the *Ciepsydra Spring*, a small geyser. — Near the Fountain Geyser are the very singular and curiously fascinating ***Mammoth Paint Pots**, or *Mud Puffs*, a group of mud springs of different colours (pink, yellow, etc.), within a crater about 40 ft. in diameter. The mud is thrown up with a curious 'plopping' sound and falls back into shapes resembling flowers, etc.

About 1 1/2 M. from the hotel, somewhat difficult of access on foot owing to the marshy nature of the ground, but easily reached by tourist wagon (fare 50 c.), is the ***Great Fountain Geyser**, which rises to a height of 100-150 ft. every 8-12 hrs. and is one of the most remarkable geysers in the Park. Adjacent are many of the most interesting springs, to be found in the Park, notably **Firehole*, *Surprise*, *Mushroom*, and *Dome*.

c. From the Lower Geyser Basin to the Upper Geyser Basin.

9 M. Stage Coach in 2½-3 hrs., including halt at the *Midway Geyser Basin* (see below).

The road, which runs at first across a flat geyserite plain and then through a rolling country, reaches the (3 M.) *Firehole River* exactly opposite the *Excelsior Geyser*, in the *Midway Geyser Basin*, on the W. bank of the river, where a halt is made.

This group includes the great *Excelsior Geyser, the largest geyser in the world, throwing up nearly as much water as all the rest put together. With a short interval in 1890, it has not worked since 1888, when it threw a huge mass of water to a height of 200-300 ft. Its crater is nearly 300 ft. long and 200 ft. wide, and its walls rise 15-20 ft. above the level of the boiling water within. Its appearance amply justifies the name of *Hell's Half Acre*, which is sometimes applied to it. — A little to the N. is the beautiful *Turquoise Spring, a pool 100 ft. in diameter, remarkable for the intense blueness of its limpid water. — To the W. lies *Prismatic Lake (400 ft. long and 250 ft. wide), the marvellous colouring of which is indicated by its name. The volumes of steam which rise from it reflect those colours in a very beautiful way.

About 3 M. beyond the Middle Geyser Basin we reach the beginning of the *Upper Geyser Basin* (see below), which the road to the hotel traverses, following the course of the Firehole River. Among the springs and geysers near the road as we proceed are the *Artemisia Spring* (right), the **Morning Glory* (*i.e.* convolvulus; left), the *Fan Geyser* (r.), and the *Mortar Geyser* (r.). Beyond the bridge are the *Riverside* (l.), the *Grotto* (l.), the *Giant* (l.), the *Splendid* (r.), the *Comet* (r.), the *Daisy Geyser* (r.), the *White Pyramid* (r.; at some distance), the *Punch Bowl* (l.), the *Black Sand Basin* and *Specimen Lake* (r.), *Sunlight Basin* (r.; across the river), the *Three Sisters* (r.), the *Turban* (l.), the *Grand* (l.), the *Saw Mill* (l., these three beyond the river), and the *Castle* (l.).

The *Upper Geyser Hotel or *Old Faithful Inn* is perhaps the best in the Park.

The **Upper Geyser Basin (7300 ft.), which is about 4 sq. M. in area, contains about 40 geysers (including the largest, after Excelsior, and finest in the Park) and many beautiful hot springs. Most of the large springs and geysers are near the Firehole River. A good general view of the district is obtained from a mound near the hotel.

The chief points of interest in the Upper Geyser Basin may be seen in two rounds of about 3 M., one on either side of the river, and about half-a-day should be allowed for each; if necessary the two trips may be combined (total distance ca. 4 M.). Hurried visitors who go on foot will do well to follow the guide, who leaves the hotel daily and conducts visitors to the geysers on the right bank of the river, ending the tour at the *Castle*. It well repays the effort, however, to walk down the left bank of the river as far as the Grotto and then retrace the stage-route of the morning. In any case visitors should ascertain what geysers are 'due' and arrange their itinerary accordingly. A table at the hotel gives the periodic times of the different geysers, but few of them, with the exception of Old Faithful, can be trusted. Those who wish to see all the large geysers playing have to stay several days or even weeks; while some geysers intermit their eruptions for months and years at a time. Most of the chief geysers are marked by little wooden signs. Thick shoes or overshoes are

desirable, as parts of the formations are almost constantly wet from the overflow of the geysers. — At night a search-light is turned on the geysers.

***Old Faithful**, one of the most beautiful geysers in the Park, throws its stream, at intervals of about 68 minutes, to a height of 125-150 ft. The eruption lasts about 4½ minutes. — Those who can devote two half-days to excursions may follow the routes outlined below: Crossing the foot-bridge in front of the hotel, we reach the ***Beehive**, so called from the appearance of its cone (4 ft. high), which throws a very compact stream of water from its nozzle-like opening to a height of 150-200 ft. To the E. of the Beehive is the ***Giantess**, the interesting exhibitions of which are due once a fortnight (150 ft.). A little to the N.W. of the Giantess is the *Sponge*, so called from the appearance of its crater. To the N.E. is an interesting small spring known as the *Butterfly*. — A little farther to the N. are the *Lion*, *Lioness*, and *Cub*, to the E. of which is the *Beach*. The path next passes between *Spasmodic* (r.) and the **Saw Mill* (l., near a bridge over the Firehole) and reaches the *Turban* and the ***Grand**, the irregular eruptions of which last (200 ft. high) are very fine. Continuing to follow the path towards the N., we pass **Beauty Spring*, cross the river, pass the *Oblong Geyser* with its fine crater (to the right, close to the river), and reach (1 M. from the hotel) the ***Giant Geyser**, perhaps the grandest geyser in the Basin, which plays irregularly, throwing its column to a height of 250 ft. The eruption lasts for 1½ hr. About 200 yds. to the N. of the Giant is the ***Grotto**, remarkable for its curiously-shaped cone. We recross the river by the carriage-bridge, just above which, by the river's bank, is the attractive **Riverside Geyser* (thrice daily; 80 ft.). To the N., also adjoining the river, are the *Mortar* and the *Fan*, so called from the shape of its display, which usually follows that of Riverside. On the opposite side of the road is the exquisite ***Morning Glory Spring**, a most delicately tinted pool, so called from its resemblance to a convolvulus or morning glory. We may now return to the hotel (1½ M.) by the road passing the ***Castle**, named from the shape of its crater (every 24 hrs. or so; 75 ft.). Near the Castle is a pretty spring known as the *Castle Well*.

For our second circular walk we leave the hotel by a path leading through trees to the N.W., with *Iron Spring Creek* a little to the left. We cross this stream to visit the beautiful ***Emerald Pool** and ***Sunset Lake**, and then recross it and follow the path past the little *Mud Geyser*, to the curious *Black Sand Basin* and *Specimen Lake*, the latter a flat and dry expanse, with numerous semi-petrified trees. A waggon-road leads hence to the N. to the **Devil's Punch Bowl*, about 1 M. from the hotel, and is continued, sweeping round to the E., passing the *Splendid*, *Comet*, and **Daisy Geysers*, to the main carriage-road, which it joins near the Grotto Geyser (see above).

The *Biscuit Basin*, part of the Upper Basin about 2 M. from the hotel, is so called from its resemblance to a huge oven with biscuits baking. It includes the **Sapphire Pool*, the *Black Pearl*, and the *Silver Globe*.

d. From Upper Geyser Basin to Yellowstone Lake Hotel.

35 M. Stage in 9 hrs., including a stoppage for luncheon.

The road ascends to the S.E. along the *Firehole River* to (1½ M.) *Kepler's Cascades*, where the river descends 130 ft. in a series of leaps. About 2 M. farther on it bends to the left and follows *Spring Creek*.

From this point a side-road leads to (¾ M.) *Lone Star Geyser*, which plays at intervals of ½-2 hrs., to a height of 30 to 50 ft. — About 5 M. farther to the S., at the W. end of *Shoshone Lake*, is the **Shoshone Geyser Basin**, with the *Union* and other interesting geysers and hot springs. This may also be approached by the trail over *Norris Pass*, which leaves the stage-road about 1¾ M. beyond the road to *Lone Star Geyser*. **Shoshone Lake** (7740 ft.), 6½ M. long and ½-4 M. wide, consists of two expanses united by a narrow strait. It is surrounded by wooded hills.

Our road ascends steadily through the picturesque *Spring Creek Canyon*, skirting the stream to its source at *Craig Pass*, on the (4½ M.) '*Continental Divide*' or *Watershed* of the **Rocky Mts.** (8250 ft.). Just beyond the pass lies *Isa Lake*, a small lily-covered sheet of water on the summit, which sends its waters on the one side to the Atlantic, on the other to the Pacific Ocean. The 'Divide' makes a curious horseshoe bend to the N. here, but the road continues in a straight direction and hence still remains for some distance on the Pacific slope. From Isa Lake we descend the steep and winding *Corkscrew Hill* to *De Lacy Creek*. Beyond the Creek we ascend again, passing (2½ M.) *Shoshone Point*, which affords a beautiful view of Shoshone Lake (p. 455) and a distant view (60 M.) of the historic *Teton Mts.* (13,690 ft.; ascended twice only, in 1872 and 1898). We reach the second crossing of the Divide (8350 ft.) 4½ M. farther on, near *Lost Lake*. The road then descends, passing *Duck Lake*, to (4 M.) *Yellowstone Lake* (see below), which we reach at the *West Bay* or *Thumb* (Luncheon Station). The *Hot Spring Basin* at the Thumb contains about 70 hot springs, many of which are remarkable for their brilliant colouring. One lies so close to the lake, that it is literally possible to catch a trout in the lake and cook it in the spring without changing one's position. About 150 yds. from the lake is a group of **Paint Pots*, which many visitors consider more striking than those described at p. 453. A *Steamer* plies from this point to (25 M.) the Yellowstone Lake Hotel (see below).

This steamer-trip forms a very attractive alternative route to the hotel (fare $ 1½ extra).

From the Thumb Station a road leads to the S. to the (48 M.) *Jackson Hole* and Teton Mts. It is much used as an approach to the Park by camping parties from the S., while many tourists also make a side-trip from the Park to see the grand scenery of the valley known as the Jackson Hole.

From the Thumb to the Hotel our road runs for some way along the W. bank of **Yellowstone Lake** (7721 ft.; 1428 ft. above the top of Mt. Washington, p. 331), one of the largest bodies of water in the world at so lofty an altitude, having an area of 140 sq. M., a shore-line of about 100 M., and a longest diameter of 18 M. Its shape is irregular and has been likened to a hand with three fingers and a thumb. The outlet is at the wrist (N.), near the Yellowstone Lake Hotel. The lake is surrounded by lofty mountains. The *Yellowstone River* enters it on the S. and issues from it on the N. After 5 M. the road quits the lake and leads across the hills (a somewhat monotonous route) to (9 M.) *Bridge Bay*, where it regains the lake. The bay gets its name from a curious *Natural Bridge*, 40 ft. high and 30 ft. across, passed about 1½ M. before we reach the bay. A drive of 2 M. more along the N. shore brings us to the Hotel.

The **Yellowstone Lake Hotel*, 35 M. from the Upper Basin, is well situated on a bluff overlooking the lake and backed by a forest. It commands a fine view of the lake and of the **Absaroka Mts.** beyond. Among the chief of these (named from N. to S.) are *Mts. Cathedral*

(10,700 ft.), *Chittenden* (10,190 ft.), *Silver Tip* (10,400 ft.), *Grizzly* (9700 ft.), *Doane* (10,500 ft.), *Langford* (10,600 ft.), *Stevenson* (10,300 ft.), *Atkins* (10,900 ft.), *Schurz* (10,900 ft.), *Eagle Peak* (10,800 ft.), and *Table* (10,800 ft.). Nearly due S., considerably to the right of those just mentioned, are the **Red Mts.**, culminating in *Mts. Sheridan* (10,250 ft.) and *Hancock* (10,100 ft.). The numerous islands in the lake also enter pleasantly into the view.

Boats (per hour 50 c., with rower $1) may be hired for excursions, and the fishing is excellent, the trout being large and voracious (use of fishing-tackle 50 c. a day). — The bears in the adjoining forest are as tame as those mentioned at p. 453.

Near the Yellowstone Lake ends the E. approach to the Park, which begins at *Cody* (comp. p. 449), 34 M. beyond the boundary of the Forest Reserve, through which and through the Park it runs for 60 M. to this point. A pleasant excursion may be made in a day from the hotel to (10 M.) *Pelican Creek* and (22 M.) *Sylvan Pass*. The scenery on the route to Cody, particularly in Sylvan Pass and along the *Shoshone River*, is very grand.

e. From Yellowstone Lake to the Grand Canyon.

17 M. Stage in 3½ hrs.

The road leads to the N. and N.W., following the left bank of the *Yellowstone River*. About 7½ M. from the hotel, to the left, is the ***Mud Caldron** or **Volcano**, one of the weirdest and most extraordinary sights in the Park. It consists of a circular crater about 40 ft. deep, the bottom of which is filled with boiling mud, constantly rising in pasty bubblings, interspersed with more violent eruptions. The horrible appearance of the muddy pulsations and the groaning sounds which accompany them suggest an entrance to Inferno, with the spirits of the damned making abortive efforts to escape. — The road here enters *Hayden Valley*, a broad open tract along the Yellowstone. At *Trout Creek*, 2 M. farther on, a branch-road or loop diverges for *Sulphur Mt.*, or the *Crater Hills* (150 ft.), where large amounts of sulphur have been deposited by the various vents. The large boiling spring, at the foot of the highest hill, is strongly impregnated with sulphur, and its fumes are very disagreeable. To the left are several small mud-springs. These are best visited from the Grand Canyon Hotel. The stage-road continues to (3½ M.) *Alum Creek*, about 2½ M. beyond which we arrive at the head of the rapids of the Yellowstone, just above the Upper Falls. To the right here is a new concrete and steel bridge, crossing the river and giving access to Artist's Point (p. 458). Our road continues in a straight direction, crosses a wooden bridge, and passes close to the *Upper Falls* (p. 458). In ¼ M. more we reach the junction of the cross-road to (11 M.) *Norris* (see p. 452), then cross *Cascade Creek* on a steel arch bridge of 250 ft. span, and ascend the hill, with a capital view of the *Grand Canyon*, to the —

***Grand Canyon Hotel** (7710 ft.), which is finely situated on an elevated plateau, about ¼ M. from the river and the upper end of the canyon. It is a pleasant point for a stay of a few days, as the attrac-

tions of the canyon demand repeated visits, while good fishing may be enjoyed in the river above and below the falls.

The **Grand Canyon of the Yellowstone, in some ways the most marvellous and indubitably the most beautiful of the wonders of the Yellowstone, extends from the Great Falls (see below) to a point near the E. Fork, a distance of about 20 M. Its depth is from 600 to 1200 ft., and its width at the top varies from about 300 yds. to 1500 yds. The upper part of the canyon, where it is at its deepest and narrowest, is also the scene of its most gorgeous colouring, the tints of the enclosing cliffs including the most brilliant shades of red, orange, yellow, and purple, 'as if a rainbow had fallen from the sky and been shattered on the rocks'. The formation of the crags and cliffs is exceedingly bold and picturesque. Far below flows the river, a thread of the most exquisite green. The margins of the canyon are fringed with dark-green pines.

Visitors should follow the good road which runs to the S.E. from the hotel across the grass (comp. map of canyon in hotel), enters the wood, and leads to the brink of the canyon, where a flight of 500 steps descends to the top of the Falls. Following the road to the E. we reach (1/2 M.) *Look-out Point, affording one of the finest views of it. To the W. appear the *Lower Falls* (see below), at the head of the canyon. [The *Red Rock*, below Look-out Point, reached by a steep but safe trail, also affords a good view of the falls.] Continuing on the road along the edge of the canyon we pass various good points of view. — 1 1/2 M. *Grand View*, opposite *Artist's Point* (see below). A small geyser may be observed sending up its column of steam far below on the side of the chasm, and a quick eye will easily detect some eagles' nests on the inaccessible peaks of the pinnacles of rock below us. In about 1 1/2 M. we reach *Inspiration Point (1000 ft. above the river), which commands a splendid view of the gorgeous colours of the upper part of the canyon (afternoon-light the best) and of the more sombre hues of the pine-clad Lower Canyon. This is the limit of the road in this direction and we may now retrace our steps. [Those who do not care to walk both ways can ride or drive to Inspiration Point and Look-out Point (fare $ 1; no charge made by Wylie Co.).]

The **Great or Lower Falls of the Yellowstone, as striking, though not so high, as the famous falls of the Yosemite (p. 545), plunge from a height of 360 ft. into the abyss of the chasm. The river suddenly contracts here from a width of 250 ft. to 75 ft. The falls are reached from the hotel in 10-20 min. either by steps or by an easy trail diverging from the road at the bridge over the Cascade Creek (p. 457). The platform at the head of the falls commands a fine view of the canyon, with Look-out Point conspicuous to the left (Inspiration Point concealed). — To reach the *Upper Falls, which are 1/2 M. farther up and about 110 ft. high, we cross the above-mentioned bridge, follow the road for a few minutes more to the junction point, cross a second bridge (to the left), and then follow the road through the wood. The rapids above the Upper Falls are picturesque; the stretch of water between the two falls is to all appearance calm and sluggish, though the current is really very rapid. — Some good views are also obtained from the opposite side of the canyon, which may be reached by the new bridge mentioned at p. 457. One of the grandest is that from *Artist's Point*, near which Thomas Moran painted the picture of the Yellowstone, now in the Capitol at Washington (p. 216).

From the Grand Canyon to Mt. Washburn and Tower Falls (20 M.; stage in 5 hrs., including stop at the summit of Mt. Washburn). This is a remarkable mountain drive, presenting grand scenery of a character entirely different from that passed through in other parts of the circuit of the Park. From the hotel the road ascends gradually along the wooded

S. slope of Mt. Washburn, affording beautiful views and traversing vast fields of wild flowers. At (7 M.) *Dunraven Pass* (8865 ft.) the road divides, the main and nearly level branch leading straight on through the pass and along the W. flank of the mountain. We, however, take the branch to the right, which ascends in many steep zigzags and windings, to (3 M.) the top of Mt. Washburn (10,345 ft.), about 1500 ft. above Dunraven Pass. The splendid *View from this point includes a large part of the Park, Yellowstone Lake, the Teton Mts., Cinnabar Mt., and the Absaroka and Gallatin ranges. Mt. Washburn was one of the craters which threw out the material which now composes the Park plateau, and its outlines can be traced to the W. of the summit, on the watershed of Tower Creek. — From the top the road descends the slope to (3 M.) the point of junction with the main road (see above; 4 M. from the point of divergence). It then continues the descent to (6 M.) *Tower Creek*, which we cross near the *Tower Falls (110 ft. in height), perhaps the most beautiful in the Park. They are not, however, visible from the road. About ½ M. farther on the road passes under an overhanging cliff on the left (200 ft.), while on the right we look down into the chasm of the Yellowstone, 500 ft. deep. Above the bed of the river rises the *Needle*, a vertical column of rock, 360 ft. high.

This is an excellent centre for excursions and fishing. Among the points of interest are the *Petrified Forests*, *Lost Creek Canyon* and *Falls*, *Lamar River Canyon*, *Soda Butte*, and *Death Gulch*. To the E., among the Absaroka Mts. (p. 456), is the region known as **Hoodoo** or **Goblin Land**, where the extraordinarily grotesque forms of the rocks and crags will repay the lover of the marvellous who is prepared for a somewhat rough and trying expedition. — A hotel is to be built here, and in the meantime quarters may be obtained at the *Roosevelt Camp* (Wylie; $ 3), about 2 M. from the falls (comp. p. 452).

The region about the Tower Falls Hotel is known popularly as '*Yancey's*', from John Yancey (d. 1903), who kept an inn here for many years.

f. From the Yellowstone Canyon to Mammoth Hot Springs.

32 M. Stage in 7-8 hrs.

We return across the steel bridge to the Norris Basin road (p. 457), which leads to the W. through pine forests, gradually ascending to (3½ M.) the 'divide' (8100 ft.) between the Yellowstone and the Missouri. About 2 M. farther on are the *Twin* or *Wedded Trees*, two pines connected by a branch. At (3½ M.) the *Virginia Cascades* the road is carried along the face of the cliff by a clever piece of engineering. — 3 M. *Norris Hotel* (p. 452).

Hence to (20 M.) *Mammoth Hot Springs*, see R. 72 b.

73. From Council Bluffs and Omaha to San Francisco.

1787 M. Union Pacific Railroad to (1004 M.) Ogden in 29-34 hrs. and Southern Pacific Railway thence to (1787 M.) San Francisco in 27 hrs. (through-fare $ 50; sleeper $ 11.50). Through-carriages (with baths, barber's shop, etc.) and dining-cars (meals *à la carte*) are attached to the two daily trains, the 'Overland Limited' and the 'China & Japan Fast Mail'. The 'Overland Limited' connects at Oakland Pier with Pullman sleepers for Los Angeles (R. 82a), while the 'Fast Mail' connects with a Los Angeles sleeper at Cheyenne (p. 460). Passengers from New York to San Francisco by this route (in ca. 4½ days; fare, see p. xxii) change carriages at Chicago.

The opening of the Union Pacific and Central Pacific Railways (the latter now absorbed in the Southern Pacific system) in 1869 completed the first railway route from the Atlantic to the Pacific. The undertaking was

performed with the aid of large subsidies in money and land from the U. S. Government. Though the Rockies and several other mountain-ranges are crossed, the gradients are seldom severer than 1:50, and no tunnels were necessary except in Utah and across the Sierra Nevada.

Council Bluffs and *Omaha*, see pp. 417, 418. The train at first traverses the manufacturing suburbs of Omaha. Beyond (31 M.) *Elkhorn* (1165 ft.) we run along the left bank of the *Platte River*, through a farming and prairie district. At (49 M.) *Fremont* (1190 ft.) we are joined by a line from *Sioux City* (p. 398). 94 M. *Columbus* (1440 ft.), the junction of lines to *Sioux City* and other points. Our train crosses the *Loup Fork* and enters upon an absolutely straight stretch of track 40 M. in length. 156 M. *Grand Island* (1860 ft.), a railway-centre of some importance; 199 M. *Kearney* (2145 ft.); 234 M. *Lexington* (2385 ft.). At (294 M.) *North Platte* (2795 ft.; 3640 inhab.) we cross the *North Platte River* and pass from 'Central' to 'Mountain' time (p. xiv). — At (375 M.) *Julesburg* (3455 ft.), the junction of the direct line to *Denver* (see R. 66 c), the line dips into *Colorado* but returns almost at once to Nebraska. We now quit the Platte River, which we have followed for about 350 M.

Near (417 M.) *Sidney* (4090 ft.) the train passes from the farming district of Nebraska into the grazing district, in which immense herds of cattle are reared. Between (468 M.) *Bushnell* and (476 M.) *Pine Bluffs* we enter *Wyoming*, called the 'Equality State' because its men and women have equal voting rights. — 519 M. **Cheyenne** (pron. Shyénn; 6050 ft.; *Inter-Ocean Hotel*, $ 2-3½; *Normandie*, R. from 50 c.), the capital of Wyoming (see above), with (1905) 13,656 inhab., is the junction of the Denver Pacific branch of the U. P. System (from Kansas City and Denver; comp. pp. 475, 476). It is one of the chief centres of the cattle industry of the N.W. Fort Russell lies 4 M. to the N. of Cheyenne. — The snow-clad peaks of the *Rocky Mts.* now come into sight on the left, including *Long's Peak* (p. 473) and the distant *Spanish Peaks* (p. 492). To the N. (right) are the *Black Mts.* The train ascends rapidly, passing (538 M.) *Granite Canyon* (7310 ft.), tunnels through *Sherman Hill*, and at (552 M.) *Sherman* (8000 ft.) reaches the culminating point of the line, where we cross the main ridge of the **Rocky Mts.**, the great 'Continental Divide'. To the left is the *Ames Monument*, 65 ft. high, erected to Oakes and Oliver Ames, to whom the completion of the U. P. Railway was mainly due. To the left may be descried *Pike's Peak* (p. 491), 165 M. off. To the right are the *Red Buttes*. — 576 M. **Laramie** (7150 ft.; *Pacific Hotel*, $ 4; *Johnson, Kuster*, $ 2), a city of (1905) 7601 inhab., lies on the *Big Laramie River*, in the midst of the so-called *Laramie Plains*, one of the best grazing districts in the United States. It is a wool-market of considerable importance.

In summer stages ply from Laramie to **North Park**, which lies about 60 M. to the S. North Park is one of the great natural parks of Colorado, which consist of large elevated plains or upland valleys surrounded by lofty mountains. They offer considerable attractions to the adventurous traveller and to the sportsman in search of large game, but are some-

what beyond the range of the ordinary tourist. North Park has an area of 2000-2500 sq. M., with a mean elevation of 8-9000 ft. It may also be reached from Denver viâ *Fort Collins* (see p. 474). The other natural parks of Colorado are *Middle Park* (p. 475), *Estes Park* (p. 473), *South Park* (p. 475), and *San Luis Park* (p. 492).

Beyond Laramie the train continues to descend through rugged hilly scenery. To the right rises *Laramie Peak* (9000 ft.), to the left *Elk Mt.* (11,510 ft.), the N. outpost of the *Medicine Bow Mts.* 615 M. *Rock River* (6700 ft.; Rail. Restaurant); 637 M. *Allen* (6815 ft.), 653 M. *Hanna* (6790 ft.). Beyond (678 M.) *Fort Steele* (6505 ft.) we cross the *North Platte*, which re-appears here, 300 M. from the point we last saw it (see p. 460). We now begin to ascend again. 693 M. *Rawlins* (6745 ft.). We now cross another (725 M.) '*Continental Divide*' (7100 ft.), beyond which the train descends to the plains. 787 M. *Point of Rocks* (6505 ft.). At (827 M.) *Green River* (6080 ft.) we cross the river of that name, and the scenery again improves. The construction of the line between Green River and (840 M.) *Bryan* (6185 ft.) deserves attention.

857 M. **Granger** (6280 ft.) is the point at which the Portland line *(Oregon Short Line)* diverges to the right from the San Francisco line (see p. 467). The latter continues to run towards the W. through a somewhat monotonous country. Good views to the left of the snow-clad *Uintah Mts.*, the only range in the United States running E. and W. 886 M. *Carter* (6510 ft.). Beyond (901 M.) *Leroy* (6700 ft.) we pierce *Aspen Ridge*, one of the E. foot-hills of the **Wasatch** or **Wahsatch Mountains**, by a tunnel 1970 yds. long. 927 M. *Evanston* (6760 ft.). About 8 M. farther on we enter *Utah* (called by the Mormons 'Deseret'). The *Utah Enclosed Basin*, which we now traverse, is remarkable for the fact that its waters have no outlet to the sea, but flow into salt lakes which in summer get rid of their surplus by evaporation. At (947 M.) *Castle Rock* (6240 ft.), where an observation car is attached to the train, we enter the wild ***Echo Canyon**, with its wonderful rock and mountain scenery. We emerge from this near (963 M.) *Echo* (5470 ft.), and a little farther on reach the ***Weber Canyon**, wider and less confined than Echo Canyon, but in its way equally imposing. Tunnels. Beyond (986 M.) *Peterson* (4895 ft.) we descend into the *Valley of Salt Lake.*

1004 M. **Ogden** (4300 ft.; *Reed Ho.*, R. from 75c.; **Depot Hotel*, with rail. restaurant, R. from $1, D. 75 c.; *Broom House*, R. from 75 c.), the W. terminus of the Union Pacific R. R. and the E. terminus of this section of the Southern Pacific R. R., is a prosperous industrial city of (1900) 16,313 inhab., situated on a lofty plateau surrounded by mountains. It is also the terminus of the *Rio Grande Western Railway* (see R. 77a). *Salt Lake City* lies 37 M. to the S. (see p. 499).

From Ogden to Pocatello, 134 M., *Oregon Short Line* in 5 hrs. — The line runs to the N., affording views of *Salt Lake* (p. 502) to the left. Beyond (9 M.) *Utah Hot Springs*, at the base of the *Wahsatch Mts.*, we see to the right some fine crag scenery with curious conical peaks. From (14 M.) *Willard* a visit may be paid to the (3 M.) *Willard Falls* and

Canyon. Beyond this point the ancient bench-marks on the mountains are very conspicuous. Between (21 M.) *Brigham* and (30 M.) *Honeyville* we cross a small shallow lake. Farther on the scenery is imposing, with the deep **Bear River Canyon* to the left, while the rocky hills tower above us to the right. We cross two lateral gorges on trestles. On the other side of the canyon is an irrigating canal, a fine piece of engineering, tunnelled at several points through the rock. 49 M. *Cache Junction;* 71 M. *Dayton;* 111 M. *McCammon*. — 134 M. **Pocatello**, see p. 467.

A favourite point in the neighbourhood is the **Ogden River Canyon* (a drive of ½ hr.). — From Ogden to *Salt Lake City*, see p. 497.

To the W. of Ogden we continue our journey by the *Southern Pacific Railroad*, which formerly was carried around the N. end of *Salt Lake*, but now crosses that sheet of water, nearly in the middle, on a trestle 23 M. long, almost all of which is to be filled in with solid earthwork. By the construction of this so-called 'Salt Lake Cut-off', which cost $ 4,500,000 (900,000 *l.*), the railway has been shortened by 44 M., and improved by the consequent elimination of curves and grades. Farther to the W., more than 360 M. of the original road-bed of the Central Pacific Railroad have been abandoned. By all this colossal work the time of the transcontinental journey has been reduced by about 7 hrs.

1108 M. *Umbria* is the end of the cut-off. To the S.W. rises *Pilot Peak* (10,900 ft.). Just before reaching (1118 M.) *Tecoma* (4810 ft.) we enter *Nevada* ('Sage Brush State'), the boundary being marked by a stone monument. 1145 M. *Cobre*, junction of a line to (141 M.) *Ely*. At (1156 M.) *Pequop* (6185 ft.) we cross the ridge of the *Pequop Mts*. We then descend into *Independence Valley* and re-ascend to (1171 M.) *Moor* (6165 ft.), in *Cedar Pass*. 1180 M. *Wells* (5630 ft.), with several springs, to some of which no bottom has been found; 1213 M. *Halleck* (5230 ft.); 1235 M. *Elko* (5065 ft.; Rail. Restaurant). *Elko Mt.* is seen first to the right and then to the left. Pinte Indians now begin to show themselves at the stations, offering for sale baskets, moss-agates in tiny bottles, and other odd wares. 1261 M. *Carlin* (4905 ft.). 1270 M. *Palisade* (4840 ft.), in a small canyon, is the junction of a narrow-gauge line to (80 M.) *Eureka*, in a rich mining district. Farther on we cross the *Humboldt River*, and follow it for some time. To the N. are the *Cortez Mts*. 1321 M. *Battle Mountain* (4510 ft.), junction of a line to (93 M.) *Austin*. 1381 M. *Winnemucca* (4330 ft.). To the N. are the *Santa Rosa Mts*. Beyond (1421 M.) *Humboldt* (4235 ft.), a tiny oasis in the desert, we again cross the Humboldt River, which flows into the *Humboldt* or *Carson Sink*, to the S. of the line. — 1482 M. *White Plains* (3895 ft.), the lowest point on the line for 1300 M. — 1497 M. *Hazen* (4070 ft.).

From Hazen to Fallon, 16 M., *Southern Pacific Railway* in 1¼ hr. This line opens up the '*Carson Sink*' region, where at least 400,000 acres are now being reclaimed for cultivation by the so-called *Truckee-Carson Irrigation Project* (to cost $ 9,000,000), by which the superfluous water of the Truckee is transferred to the bed of the Carson. — *Fallon* has about 1000 inhab. and is growing rapidly.

From Hazen to Keeler, 288 M., *Southern Pacific Railway* in 18 hrs. — This line gives access to a rich mining district. — 28 M. *Churchill;* 128 M. *Mina;* 137 M. *Tonopah Junction* (p. 463); 234 M. *Alvord*. — 288 M. *Keeler*.

From Tonopah Junction (p. 462) the *Tonopah & Goldfield R. R.* runs to (60 M.) *Tónopah* (6200 ft.; 12,000 inhab.) and (91 M.) *Goldfield* (5700 ft.; 15,000 inhab.), two new and very productive gold-mining settlements.

From Goldfield the *Tonopah & Tidewater R. R.* runs to the S. through the *Bullfrog* mining district to (241 M.) *Ludlow* (p. 484). — 72 M. *Beatty* and (81 M.) *Rhyolite* are the chief centres of the Bullfrog district. — From (119 M.) *Death Valley unction* a branch-line runs to (7 M.) *Ryan*. This is the starting-point for explorers of the notorious *Death Valley*, a thirsty wilderness, which acquired its name from the loss of numerous emigrants who attempted to pass through it in 1849. It contains the lowest point in the United States (ca. 275 ft. below sea-level), which, curiously enough, is in the same state as and only 75 M. from the highest point (Mt. Whitney, p. 484). The valley has a certain economical value as a source of borax. — Automobiles have done good service in the Nevada deserts and are used in many places on regular stage-routes.

At (1516 M.) *Derby* (4085 ft.) we begin the long ascent to the ridge of the Sierra Nevada, following the *Truckee River*, which we cross nine times before arriving at Reno. The scenery becomes picturesque. — 1543 M. **Reno** (4500 ft.; *Riverside*, $ 2½; *Golden Eagle*, R. from $ 1), a busy town of 4500 inhab., with the State University of Nevada (300 students; School of Mines), flour-mills, and smelters.

From Reno to Virginia City, 52 M., railway in 3 hrs. The chief intermediate station is (31 M.) **Carson** (*Arlington*, $ 2-3), the capital of Nevada, a small city of 2100 inhabitants. Stages run hence daily (fare $ 2) to (15 M.) *Glenbrook*, on *Lake Tahoe* (see below).

52 M. **Virginia City** (6205 ft.; *International*, $ 2-3), a silver-mining city of 2695 inhab., will well repay a visit to all who are interested in mining. The famous *Comstock Lode* has produced (since 1859) gold and silver to the amount of $ 300,000,000 (60,000,000 *l.*). The *Sutro Tunnel*, which drained the lode, is nearly 4 M. long and cost $ 2,500,000. *Mt. Davidson* (7825 ft.) commands an extensive view. — Tourists may leave Reno in the morning, spend the greater part of the day at Virginia City, return for the night to Carson, drive to *Glenbrook* (see below) next day, cross Lake Tahoe to *Tahoe*, and go thence by train to (15 M.) *Truckee* (see below).

Reno is also the junction of a narrow-gauge railway running N. to (144 M.) *Madeline* and (164 M.) *Likely*. Between the main South Pacific line and the N. end of Lake Tahoe rises *Mt. Rose* (10,800 ft.), with a weather-observatory on its top.

Beyond Reno the train enters *California* ('El Dorado State'). — 1578 M. *Truckee* (5820 ft.).

From Truckee to Tahoe, 15 M., railway in 1 hr. (return-fare, including steamer-circuit of Lake Tahoe, $ 5). — The narrow-gauge line runs through the picturesque *Truckee River Canyon*. 11 M. *Deer Park*, for (2½ M.) *Deer Park Springs* (Hotel, $ 2½-3). — 15 M. **Tahoe** (*Tahoe Tavern*, with room for 300 guests, $ 3-4) lies on the W. bank of the beautiful ***Lake Tahoe** (6225 ft.), which is 23 M. long, 12 M. wide, and 2000 ft. deep. Its clear, ice-cold water never freezes, although surrounded by snow-clad mountains. It is one of the most attractive scenic features of California. — A small steamer, plying in connection with the trains, makes the round of the lake (8 hrs.), calling at *McKinney's* (Hotel, $ 10-15 per week), *Rubicon Park* ($ 2), *Tallac* (Tallac Hotel, from $ 2½, R. from $ 1), *Glenbrook* (Glenbrook Inn, $ 2½), *Brockway* (Hotel, from $ 2½), and other points.

Numerous snow-sheds are now passed. About 3 M. to the W. of Truckee is the pretty *Lake Donner*, the name of which is associated with a sad tale of suffering and death in the early annals of the pioneers of California (1846-47). The train continues to ascend, through imposing scenery, and reaches the highest point of the pass across the

Sierra Nevada at (1592 M.) *Summit Station* (7020 ft.), where we thread a tunnel 530 yds. long. About 4 M. to the N. is *Mt. Stanford* or *Fremont's Peak* (9175 ft.; *View).

The Sierra Nevada ('Snowy Range') is the name given in California to the magnificent range the N. continuation of which, in Oregon and Washington, is known as the *Cascade Mts.* (see p. 444). It forms the W. edge of the highest portion of the Cordilleran system (p. lxvi) and is, perhaps, on the whole the most conspicuous chain of mountains in the country. From Mt. San Jacinto to Mt. Shasta it is about 600 M. long; but some geographers consider that the Sierra proper ends at Lassen's Peak, 100 M. to the S. of Mt. Shasta. Geologically, this is certainly true, for the Cascades, including Lassen's Peak and Shasta, are volcanic, and the Sierra is not (comp. p. 506). The average elevation of the Sierra is 8-10,000 ft., and several of its peaks, such as *Mt. Whitney* (p. 484), *Mt. Shasta* (p. 505), *Mt. Williamson* (14,385 ft.), *Mt. Tyndall* (14,025 ft.), *Mt. Langley* (14,042 ft.), and *Mt. Corcoran* (14,095 ft.), attain heights of over 14,000 ft. The *Yosemite Valley* (p. 542) and its enclosing peaks are, perhaps, the best-known part of the Sierra Nevada; but it abounds throughout in the grandest mountain-scenery and offers many opportunities for the Alpine explorer. There are some large glaciers in the N. part of the range. The first number of the 'Alpina America', the quarterly journal of the American Alpine Club, is devoted to an account of the Sierra Nevada by Joseph N. Le Conte (Jan., 1907).

As we descend on the Californian side of the range the scenery continues to be very picturesque, while the change in vegetation and the brilliance of the flowers announce the mild climate of the Pacific Slope. The descent is very rapid, and the transition from snow-wreaths to sub-tropical vegetation comes with startling swiftness.

At places the line runs along the face of precipices, on ledges barely wide enough to accommodate the tracks. Snow-sheds, covering about 37 M. of the track, cut off much of the view at first; but this has been greatly remedied, of late, by the construction of openings on the level of the car-windows. Many traces of the placer-mining of the 'Forty-Niners' are visible on both sides. — 1614 M. *Emigrant Gap* (5225 ft.); 1619 M. *Blue Canyon* (4695 ft.); 1631 M. *Dutch Flat* (3395 ft.). Farther on we pass the rocky promontory known as **Cape Horn*. From (1643 M.) *Colfax* (2420 ft.) a narrow-gauge line runs to (17 M.) *Grass Valley* (4719 inhab.) and (23 M.) *Nevada City* (3250 inhab.), two gold-mining settlements. 1661 M. *Auburn* (1360 ft.; Freeman, $ 2). Orchards and vineyards are now numerous. Oranges grow at (1666 M.) *Newcastle* (955 ft.), ripening very early in the year. 1679 M. *Roseville Junction* (165 ft.; p. 504).

1697 M. **Sacramento** (30 ft.; *Sacramento*, from $ 2; *Golden Eagle*, from $ 2½; *Capitol*, R. from $ 1), the capital of California, with 29,282 inhab., lies on the E. bank of the *Sacramento River*, just below its confluence with the *American River*. It is regularly laid out, with wide straight streets, shaded with trees and bordered by gardens. It is an important railway-centre and carries on an active trade. The most conspicuous building is the *State Capitol*, a large and handsome structure containing a library of 150,000 vols. (fine view from dome). It is surrounded by a pleasant park, containing an 'Insectary', for the propagation of parasites of injurious insects. Other important edifices are the *Court House*, the *Free Public Library*

(40,000 vols.), the *Orphanage*, the *Roman Catholic* and the *Protestant Episcopal Cathedrals*, and other churches. The *Crocker Art Gallery* contains pictures, Californian minerals, and a school of art. The *State Agricultural Society* has an exhibition building. *Fort Sutter Park* contains a reproduction of the fort established here in 1840.

The *Riverside Drive* along the Sacramento is pleasant. — From Sacramento to its mouth the banks of the river are one vast orchard and garden. Steamers ply to San Francisco, showing levees, dredgers at work, and fields of beans, hemp, and alfalfa. Up the river are extense hop-gardens (harvest in Aug.). — MOTOR RAILWAY CARS, made at Omaha (comp. p. 418), run from Sacramento to *Folsom* (see below), *Marysville*, *Chico* (p. 504), *Oroville*, and other points.

FROM SACRAMENTO TO LATHROP, 57 M., railway in 2¼ hrs. This line formed part of the old route from Sacramento to San Francisco. — 21 M. *Folsom*, with gold-dredging. — 48 M. **Stockton** (25 ft.; *Yosemite*, *Imperial*, from $2), a flourishing little city of 17,506 inhab., with large flour-mills, lies at the head of navigation on the *San Joaquin* ('Wahkeen') *River*. Along the river-bottom above and below the town are vast 'truck-farms' for the earliest markets. The most prominent building is the *State Insane Asylum*, seen to the right as we enter the station. From Stockton to the *Calaveras Grove* or to the *Yosemite*, see below. — At (57 M.) *Lathrop* we join the Southern Pacific line from San Francisco to the S. (comp. p. 529).

Stockton is also the junction of the Merced branch of the Southern Pacific Railway to (32 M.) *Oakdale*, whence the *Sierra Railway* runs to (41 M.) *Jamestown Junction* (Nevill's; Willows), (45 M.) *Sonora*, and (57 M.) *Tuolumne* (p. 519). This latter line affords one of the approaches to the Yosemite, connecting at (35 M.) *Chinese* with stage-coaches running viâ *Big Oak Flat* to (35 M.) *Crocker's* (fare $ 7), where horses may be obtained for the ride to (15 M.) the valley. Or a carriage may be hired at Jamestown for the drive to (45-50 M.) the valley (comp. pp. 540, 541). — Stockton is also the junction of a branch-line to (30 M.) *Milton*.

From Jamestown Junction (see above) a branch-line leads to (19 M.) *Angels* (Angels, from $ 2), whence stages run viâ (7 M.) *Murphy's* (Mitchler's Hotel), where the night is spent, to (22 M.) the *Calaveras Grove of Big Trees*. Near Murphy's is **Mercer's Cave*, containing many large chambers and beautiful stalactites. — The **Calaveras Grove* (*Big Tree Grove Hotel*, $ 2), now a National Park, is the northernmost of the Californian groves of big trees, and it is the nearest to San Francisco. It is, however, comparatively seldom visited, as the Mariposa Grove (p. 549) is conveniently included in an excursion to the Yosemite. The *Sequoia* or *Wellingtonia gigantea*, the 'big tree' of California, is found only on the W. slope of the Sierra, while the *Redwood* or *Sequoia sempervirens*, belonging to the same genus, is confined to the Coast Ranges (see p. 520). The Calaveras Grove (4750 ft. above the sea) covers an area about 1100 yds. long and 70 yds. wide and contains about 100 trees of large size, besides many smaller ones. The tallest now standing is the *Starr King* (366 ft.). The *Mother of the Forest* (denuded of its bark) is 315 ft. high and has a girth of 61 ft., while the prostrate *Father of the Forest* measures 112 ft. in circumference. Half-a-dozen other trees are over 300 ft. high, and many exceed 250 ft. A house has been built over a stump of a diameter of 24 ft. The bark is sometimes 1-1½ ft. in thickness. — About 5 M. to the S. is the *Stanislaus* or *South Grove*, also containing many fine trees, which may be visited on horseback.

From Sacramento to *Portland*, see R. 79.

The train crosses the river at Sacramento and runs toward the W., passing (1710 M.) *Davis* (55 ft.) and reaching at (1737 M.) *Suisun* (10 ft.; 'Sooisoon') a swampy district overgrown with *tule*, a kind of reed. To the S. is *Suisun Bay*, with *Mt. Diablo* (p. 519) rising beyond it. — 1754 M. *Benicia*, with 2751 inhab., a U.S. Arsenal, and large wharves, lies on the N. side of the narrow *Straits of Carquinez*

($^1/_2$ M.), uniting the bays of Suisun and *San Pablo*. It is accessible for ships drawing 23 ft. of water. This was the home of Heenan, the 'Benicia Boy', and the forge-hammer he used is still kept here. — The train crosses the strait on a huge ferry-boat. — 1755 M. *Port Costa*, on the S. side of the strait, also has large wharves from which wheat is shipped direct to Europe. — We now follow the S. shore of San Pablo Bay (views to the right). 1758 M. *Vallejo Junction* ('Vallayho'), the starting-point of the ferry to *Vallejo* (see p. 518), on the opposite shore. To the right lies *Mare Island* (see p. 517). Farther on we turn to the S. (left) and see the *Bay of San Francisco* on the W. (right), with *Mt. Tamalpais* rising beyond it (see p. 517). — 1777 M. *Berkeley* (Carlton, Cloyne Court, from $3), named in honour of Bishop Berkeley (p. 251), with the Colleges of Letters and Science of the *University of California*, situated among trees on the left.

The *University of California (President, *B. I. Wheeler*), founded in 1868, has played a very important part in the educational development of the Pacific Slope and will repay a visit. Its other departments are at San Francisco (see p. 514) and Mt. Hamilton (p. 523). The university is attended by about 3200 students, three-fourths of whom are at Berkeley and nearly one-third women. Tuition is free except in some of the professional departments. Some of the buildings at Berkeley are handsome, and the picturesque grounds, 250 acres in extent, command a splendid *View of the Golden Gate (p. 511) and San Francisco. The experimental grounds have been of great service to the farmers of California. The very interesting open-air *Greek Theatre*, built in 1903 on the general type of the theatre at Epidaurus, accommodates 12,000 spectators and is used for university meetings, commencement exercises, and concerts. The museums, the library (165,000 vols.), and the laboratories also deserve attention. — The *State Deaf and Dumb Asylum* is also at Berkeley.

1780 M. **Oakland** (*Key Route Inn*, *Touraine*, from $3 $^1/_2$; *Metropole*, $3), the 'Brooklyn' of San Francisco, is a flourishing city of 237,000 inhab., pleasantly situated on the E. shore of the Bay of San Francisco. It derives its name from the live-oaks, which originally covered the site of the city. Within the town-limits lies the little *Lake Merritt* (boating). Among the buildings may be mentioned the *Free Library*, the *Post Office*, and the *Merchants' Exchange*. Good view from top of the *Union Savings Bank Building*. The value of its manufactures is ca. $50,000,000; its magnificent harbour, with 15 M. of water-front, has large ship-yards and coal-bunkers. Since the San Francisco earthquake (see p. 511) Oakland has grown rapidly.

Visitors to Oakland are recommended to take the cable-car to *Piedmont Park*, in order to enjoy the splendid *View of San Francisco, the Bay, and the Golden Gate from *Inspiration Point* (especially good at sunset). — A pleasant walk may be taken to *Redwood Park*, passing the home of Joaquin Miller, the poet.

The San Francisco train skirts the W. side of Oakland and runs out into San Francisco Bay on a mole $1^1/_3$ M. long, at the end of which we enter the ferry-boat which carries us across the bay (4 M., in 20 min.). In crossing we see *Yerba Buena*, *Alcatraz*, and *Angel* islands to the right, with the *Marin Peninsula* beyond them and the *Golden Gate* opening to the W. of Alcatraz (comp. Map at p. 516).

1787 M. **San Francisco**, see p. 509.

74. From Council Bluffs and Omaha to Portland.

1802 M. Union Pacific Railroad to (857 M.) *Granger* in 24-28 hrs.; Oregon Short Line thence to (1398 M.) *Huntington* in 14 hrs.; Oregon Railroad & Navigation Co. thence to (1802 M.) *Portland* in 16 hrs. (through-fare $50; sleeper $11.50). Dining-cars are attached to the through-trains (meals *à la carte*). For general remarks on the *Union Pacific System* and its connections, see pp. 459, 460.

From *Council Bluffs* and *Omaha* to (857 M.) *Granger*, see pp. 460, 461. — Our train now runs towards the N.W., at first on a level and then gradually descending. Between (940 M.) *Cokeville* (6200 ft.) and (955 M.) *Pegram* we enter *Idaho* ('Gem of the Mountains'). 972 M. *Montpelier* (5945 ft.), near *Bear Lake* (left); 1003 M. *Soda Springs* (5780 ft.; Idanha, Williams Ho., $2), a favourite summer-resort, with numerous powerful springs.

1071 M. **Pocatello** (4465 ft.; *Union Pacific*, from $2½; *Hank's*, $2-3), a town of 4046 inhab., in the *Fort Hall Indian Reservation*, is the junction of lines running S. to (134 M.) *Ogden* (comp. p. 461) and (171 M.) *Salt Lake City* (p. 499), and N. to (263 M.) *Butte* and (351 M.) *Helena* (p. 441). Circular tickets are issued by the Railway for tours from Pocatello to the *Shoshone Falls* (see below), the *Yellowstone Park* (p. 447), *Butte*, *Helena* (p. 441), etc.

A branch-line, diverging at (50 M.) *Idaho Falls* from the Helena railway, runs to the N. to (158 M. from Pocatello) *Yellowstone*, near the W. boundary of the *Yellowstone Park*. The coaches starting here (comp. p. 449) run through the *Firehole Basin* to (3 hrs.; ca. 20 M.) the *Fountain Hotel* (see p. 453), where they join the regular route through the Park, finally returning from the Norris Basin to Yellowstone.

Beyond Pocatello the train traverses the *Great Snake River Lava Fields*, overgrown with sage-brush and greasewood; the snow-clad *Rocky Mts.* bound the distant horizon on the right. We cross the river at (1097 M.) *American Falls Station* (4340 ft.) by a bridge, 600 ft. long, affording a good view of the **Falls*. To the N. rise the *Three Buttes of Lost River* and (farther to the W.) the *Saw-Tooth Mts.* In front, to the left, appear the snow peaks of the *Washoe Range*. — 1130 M. *Minidoka* is the junction of a branch-line to (59 M.) *Twin Falls City* and (76 M.) *Buhl*. Twin Falls is the starting point for a visit to (5 M.) the *Shoshone Falls* (Shoshone Hotel), in the deep ravine of the *Snake River*.

The **Great Shoshone Falls*, with a breadth of 950 ft., fall from a height of 210 ft. and deservedly rank with the waterfalls of the Yosemite or the Yellowstone. Just above the main cataract is the *Bridal Veil Fall* (80 ft.), and 3 M. higher are the *Twin Falls* (180 ft.). An area of, perhaps, 250,000 sq. M. in the states of Washington, Oregon, California, and Idaho is covered by the so-called 'Columbia Lava', a deposit ½-1 M. in thickness. Through this the Snake River has carved its mighty canyon, at places 4000 ft. deep, and surpassed in grandeur by that of the Colorado River alone (p. 481). Towards the bottom of the canyon may be seen the incient cry stalline formations of the mountains covered by the lava-sheet. The soil of this lava district is peculiarly valuable for wheat-growing, and at is nearly all used for this purpose. At Twin Falls a huge dam (1980 ft. long; 99 sluice-gates) has been built for purposes of irrigation About 5 M.

below the Shoshone Falls, a little to the N. of the river, are the picturesque *Blue Lakes*, where boating and fishing may be enjoyed.

1179 M. *Shoshone* (4975 ft.), the junction of a branch-line running N. to (57 M.) *Hailey* (5340 ft.) and (70 M.) *Ketchum* (5820 ft.).

The *Hailey Hot Springs* (Hotel, $3), 1½ M. from the station (temp. 150°), are efficacious in rheumatism, dyspepsia, and other ailments. Near Ketchum are the *Guyer Hot Springs* (hotel).

Near (1214 M.) *Ticeska* the railway again reaches the *Snake River*, the right bank of which we now skirt more or less closely. 1231 M. *Glenn's Ferry* (2565 ft.). Level plains give place to small rolling hills and bluffs, but the scenery continues to be uninteresting. 1316 M. *Nampa* (2490 ft.) is the junction of a branch-line to (20 M.) **Boisé City** (2885 ft.; *Idanha*, *Oxford*, R. from $1), the capital of Idaho, a busy little mining city, with 5957 inhabitants. — 1325 M. *Caldwell* (2370 ft.). Between (1340 M.) *Parma* and Huntington (see below) we cross the Snake River thrice, the last crossing bringing us into *Oregon* (p. 506). 1375 M. *Weiser* (2121 ft.) is the gateway of the district known as the '*Seven Devils*', named, apparently, from the hills seen to the right. Farther on the Snake River flows through a picturesque canyon (*View to right from the bridge).

At (1398 M.) **Huntington** (2110 ft.; *Union Pacific Hotel*, R. from $1) we reach the line of the *Oregon Railroad & Navigation Co.* and change from 'Mountain' to 'Pacific' time (1 hr. slower; see p. xiv). We now leave the Snake River and ascend the picturesque **Burnt River Valley*, crossing the stream repeatedly and threading rock-cuttings and tunnels. Near (1418 M.) *Durkee* we leave the Burnt River. Beyond (1445 M.) *Baker City* (3440 ft.) we ascend across the *Blue Mts.* and then descend rapidly, passing several snow-sheds, into the fertile and beautiful **Grande Ronde Valley**, watered by the river of that name. 1489 M. *Hot Lake* (Sanitarium, from $2), with hot sulphur-springs (temp. 198° Fahr.) and a small lake; 1497 M. *La Grande* (2785 ft.), the junction of a branch-line to (21 M.) *Elgin* (to be prolonged to *Joseph*, on *Wallowa Lake*); 1522 M. *Meacham* (Rail. Restaurant); 1529 M. *Huron* (2910 ft.); 1571 M. *Pendleton* (1070 ft.), the junction of a branch-line to (47 M.) Walla Walla (p. 444) and (251 M.) Spokane. — 1615 M. *Umatilla* (300 ft.) is the junction of a branch-line to (93 M.) *Grange City* and (246 M.) Spokane (p. 443). Our line is here joined by the direct Portland trains of the N.P.R.R. (comp. p. 444). Near (1640 M.) *Castle Rock* (250 ft.) we reach the wide **Columbia River** (700-800 yds. across), the left bank of which we now follow all the way to Portland. The object of the barricades noticed here is to prevent the fine loose sand bordering the river from accumulating on the tracks, by which trains have been derailed. 1691 M. *Grant's* (180 ft.), with fine basaltic cliffs. 1695 M. *Biggs* is the junction of the Columbia Southern Railway to (70 M.) *Shaniko*. Farther on we cross the *Des Chutes River* (view to left). — 1702 M. *Celilo* lies at the beginning of the narrow and rapid stretch of the

river known as the *Dalles of the Columbia, extending to Dalles (see below).

The name (derived from the sheets of lava well exhibited on or near the river here) is sometimes confined to the gorge just above Dalles, where the river is compressed for about 2½ M. into a channel only 130 ft. wide. The river-valley here seems to have been obstructed during a recent geological period by a lava-flow, through which it has eroded this extraordinary channel. — As we approach *Dalles* we have a good view of *Mt. Hood* (see below), on the left front.

1714 M. **Dalles** (105 ft.; *Gerlinger*, R. from $1) is a small place of 3542 inhab., with a considerable trade and some manufactures. It stands at the head of the finest scenery of the Lower Columbia, which pierces the *Cascade Mts.* a little lower down.

Passenger-steamers ply regularly between this point and Portland, and the traveller is advised to perform the rest of the journey by water (110 M.), as the scenery is seen to the best advantage from the deck of the steamer. The large 'fish-wheels' are interesting. Comp. p. 508.

The scenery for the remainder of the journey to Portland is very grand, including beautiful river-reaches, sharp rocks and crags, pleasant green straths, noble trees, romantic waterfalls, and lofty mountains. Beyond (1723 M.) *Rowena* we see (to the right) the island of *Memaloose*, the ancient burial-place of the Chinook Indians, with a tall shaft marking the grave of *Victor Trevet*, a pioneer and friend of the Indians. Beyond (1730 M.) *Mosier* (100 ft.) the railway and river pass through the gorge proper of the *Cascade Mts.* (p. 444). — 1737 M. *Hood River* (Country Club Inn, from $3).

From this station stages run in summer (return-fare $7.50) to (27 M.) *Cloud Cap Inn* (6000 ft.; $3), situated at the foot of the glaciers on the N. side of Mt. Hood (11,225 ft.; comp. p. 508) and affording a grand *View. About ¼ hr. from the inn is the fine *Eliot Glacier*, and excursions may be made to many other glaciers and cascades. The ascent to the top of (4 M.) Mt. Hood takes 6-10 hrs. (there and back) and is somewhat trying, though often made by ladies. The last 900 ft. are facilitated by a rope-line, and alpenstocks are also desirable. The *View from the top embraces the whole of the Cascade Range, including the snow-peaks St. Helens, Adams, Rainier, and (sometimes) Baker to the N., and Jefferson, the Three Sisters, Diamond Peak, and Pitt to the S. The Blue Mts., on the E., and the Pacific Ocean, on the W., are sometimes seen. The view also includes the Coast Range and the valleys of the Columbia and Willamette. Mt. Shasta, 250 M. to the S., is said to be visible with a good glass. The ascent may also be made on the S. side (carr. from Portland, ca. 60 M.).

From Hood River we may also drive to (27 M.) *Trout Lake* (good fishing), near which are fine ice and lava caves. From the lake a trail leads to (40 M.) *Mt. Adams* (12,470 ft.), the ascent of which (from and to the timber-line) takes 8-12 hrs. The glaciers of Mt. Adams are very fine and have been little explored.

From (1750 M.) *Wyeth* a motor-launch crosses the river to *Collins Hot Springs* (hotel). — At (1757 M.) *Cascade Locks* the river descends 25 ft. in a series of picturesque rapids.

To avoid this obstruction the U. S. Government has constructed a canal (¼ M. long) and two large locks on the S. or Oregon shore, at a cost of about $4,000,000.

Among the numerous small waterfalls on the left of the line between (1761 M.) *Bonneville* and (1776 M.) *Latourelle*, the most picturesque are the *Horse Tail*, the *Oneonta* (at the head of its

narrow gorge), the **Multnomah* (605 ft. high), the *Bridal Veil*, and the *Latourelle*. The towering crags passed above or below here include *Castle Rock* (rising 1000 ft. on the N. side of the river), *Cape Horn* (500 ft. high), the **Pillars of Hercules*, forming a noble gateway for the railroad, and *Rooster Rock* (in the river). Beyond (1799 M.) *East Portland* and (1800 M.) *Albina* the train crosses the *Willamette* (p. 506), a broad tributary of the Columbia. A good view is obtained of Mts. Hood and St. Helens to the S. and Mts. Adams and Rainier to the N.

1802 M. **Portland** (35 ft.), see p. 506.

75. From Kansas City to San Francisco.

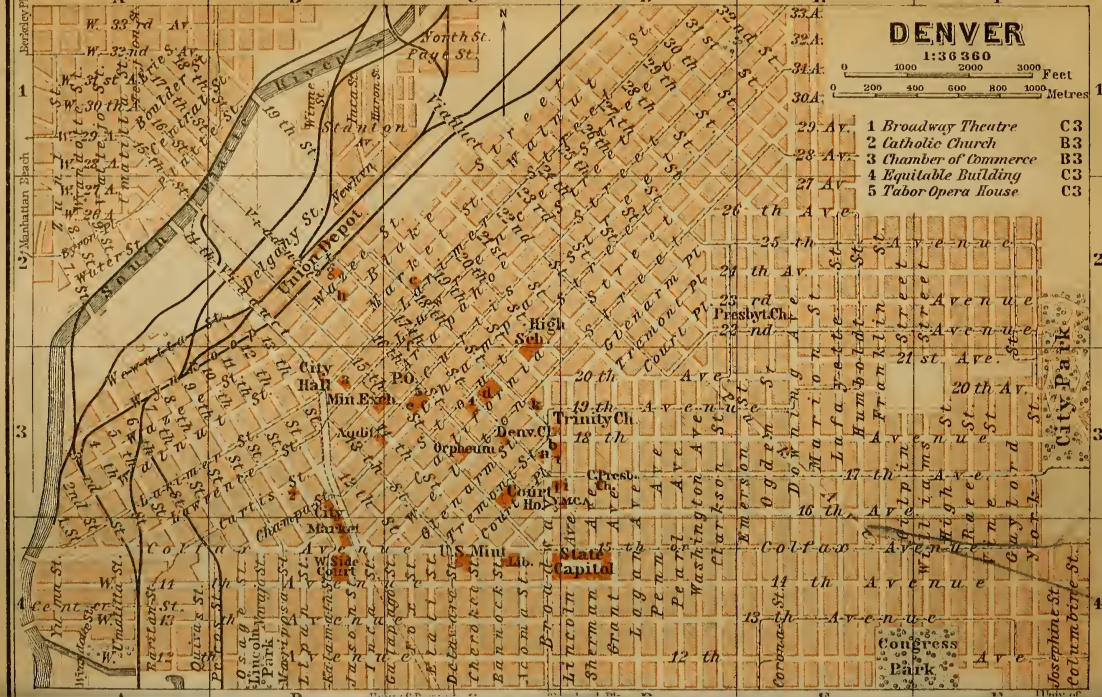
a. Viâ Union Pacific Railway System.

2014 M. Union Pacific System in 72½ hrs. (fare $50; sleeper $10.50), carriages changed at Denver or Cheyenne. Dining-cars on the through-trains.

Kansas City, see p. 423. The train at first follows the *Kansas River* towards the W. (views to the left). — 39 M. **Lawrence** (765 ft.; *Eldridge Ho.*, $2½), a pleasant little commercial city of (1907) 12,387 inhab., situated on both banks of the *Kansas River*, is the seat of the *State University* (2000 students) and also contains the *Haskell Institute*, a government training-school for Indians. We are here joined by the line from (34 M.) *Leavenworth*.

Leavenworth (710 ft.; *National*, $2-3; *Imperial*, R. from $1), on the W. bank of the *Missouri*, is a busy industrial and commercial city with (1907) 23,857 inhabitants. A colossal bronze statue of *Gen. U. S. Grant* was erected here in 1889. To the N. is *Fort Leavenworth*, an important military post.

We now traverse the great prairies of Kansas, an excellent farming and grazing country. — 67 M. **Topeka** (820 ft.; *Throop*, $2-3; *National*, $2; *Rail. Restaurant*), the capital of Kansas, a flourishing city of (1907) 42,792 inhab., on both sides of the Kansas River. The chief buildings include the *State Capitol*, the *Post Office and Custom House*, the *State Insane Asylum*, the *Reform School*, the *Free Library* (25,000 vols.), *Grace Church Cathedral*, *Washburn College*, and *Bethany College*. Topeka has large mills (value of products in 1900, $9,977,605) and a brisk trade. — 104 M. *Wamego* (930 ft.). We cross the *Blue River*. — 119 M. *Manhattan* (960 ft.), with the *State Agricultural College*. — 135 M. *Fort Riley*, an army post with an important military school. The *Ogden Monument* marks the geographical centre of the United States (excl. Alaska). — 139 M. *Junction City* (1020 ft.), for a line to *Clay Center* and *Belleville*, etc. The *Smoky Hill River* here flows to the left. — 163 M. *Abilene* (1095 ft.; Rail. Restaurant). Large crops of wheat and other grains are raised here. — 186 M. *Salina* (p. 427). We now cross the river. 223 M. *Ellsworth* (1470 ft.); 289 M. *Hays*, with *Fort Hays* (abandoned). At (303 M.) *Ellis* (2055 ft.; Rail. Restaurant) we change to 'Mountain' time (p. xiv). 377 M. *Oakley* (2980 ft.); 420 M. *Wallace* (3285 ft.;


DENVER
1:36 360
0 1000 2000 3000 Feet
0 200 400 600 800 1000 Metres
1 Broadway Theatre C3
2 Catholic Church B3
3 Chamber of Commerce B3
4 Equitable Building C3
5 Tabor Opera House C3
Union Depot
City Hall
Min. Exch.
P.O.
High Sch.
Trinity Ch.
Denv. Ch.
Orpheum
Court Ho.
City Market
U.S. Mint
State Capitol
Presbyt. Ch.
City Park
Congress Park
Lincoln Park
South Platte River
Viaduct
Berkeley Pk.
Manhattan Beach

Rail. Restaurant). We now begin to pass from an agricultural to a grazing district, where the useful 'bunch-grass' of the W. affords food. both summer and winter, to millions of cattle. Beyond (452 M.) *Arapahoe* we enter *Colorado* ('Silver State'). 462 M. *Cheyenne Wells* (4260 ft.; Rail. Restaurant). — At (473 M.) *First View* we obtain the first view of the *Rocky Mts.*, still about 170 M. distant. *Pike's Peak* (p. 491) is conspicuous, nearly due W. — Beyond (487 M.) *Kit Carson* (4275 ft.), named after the well-known scout, we follow the *Big Sandy Creek* (left) towards the N.W. 535 M. *Hugo* (5025 ft.), on the middle fork of the *Republican River*. At (550 M.) *Limon* (p. 423) we cross the Rock Island Railway. 563 M. *Cedar Point* (5695 ft.) is the highest point on this part of the line. 618 M. *Watkins* (5515 ft.).

640 M. **Denver.** — *Brown Palace Hotel (Pl. a; C, 3), R. from $ 1½; Savoy (Pl. 1; C, 3), R. from $ 1½; Shirley (Pl. i; D, 3), from $ 3, R. from $ 1; Metropole (Pl. b; C, 3), from $ 3, R. from $ 1; Oxford (Pl. g; B, 2), R. $ 1-2; Adams (Pl. k; C, 3), $ 3, R. from $ 1½; Albany (Pl. d; C, 3), from $ 2½, R. from $ 1; Windsor (Pl. c; C, 2), $ 2, well spoken of; St. James (Pl. e; C, 3), $ 2-3½, R. $ 1-1½; New Markham (Pl. f; C, 2, 3), R. from $ 1. — *Restaurants* at the Brown Palace, Oxford, and other hotels on the European plan.

Post Office (Pl. C, 3). — Electric Tramways, see p. 472.

Consuls. Brit. Vice-Consul, *Mr. A. Crebbin*; Ger. Con., *Mr. G. Plehn*. — The 'Brownell Index' (quarterly; 25 c.) is a useful guide to Denver.

Denver (5270 ft.), the capital and largest city of Colorado, lies on the S. bank of the *South Platte River*, about 15 M. from the E. base of the Rocky Mts., of which it commands a superb view. Denver, the 'Queen City of the Plains', was founded in 1858 and is a striking example of the marvellous growth of western cities, reaching a total of 35,630 inhab. in 1880 and no fewer than 133,859 in 1900. Many of Denver's buildings are large, handsome, and substantial, and the private residences and gardens are often very tasteful. The business-streets are paved with asphalt. It owes its prosperity to its position in the heart of a rich mining district and as the centre of numerous important railways (comp. pp. 473-475); while in 1900 its manufactures, including cotton and woollen goods, flour, machinery, beet-sugar, and carriages, were valued at $ 41,000,000.

The *Union Depot* (Pl. B, 2) lies at the foot of Seventeenth Street, one of the chief business-thoroughfares, and electric cars start from here for all parts of the city. Facing us as we leave the station is a large bronze *Arch*, bearing the word 'Welcome'. The traveller is recommended to ascend 17th St. and 17th Ave. by electric car to the *City Park* (Pl. F, 2, 3; 320 acres) and then to walk across to Colfax (or 15th) Ave. and return by it. On the way out we pass the *Equitable Building* (Pl. 4, C 3; cor. of Stout St.), the roof of which affords a superb *View.

The **Rocky Mts.** are seen to the W. in an unbroken line of about 170 M., extending from beyond *Long's Peak* (p. 473) on the N. to *Pike's Peak* (p. 491) on the S. Among the loftiest of the intervening summits are *Gray's Peak* (p. 473), *Torrey's Peak* (p. 473), and *Mt. Evans* (14,330 ft.). The bird's-eye view of the city at our feet includes the State Capitol (p. 472) and the fine residences of Capitol Hill on the E.

At the corner of 17th and Glenarm Sts. is the *Denver Club* (Pl. C, 3), and at the corner of Sherman Ave. (r.) are the *University Club* and the *Central Presbyterian Church* (Pl. D, 3). — In returning through Colfax (or 15th) Ave. we pass the following buildings: State Capitol (Pl. D, 4), an imposing structure erected at a cost of $2,500,000 (in the basement are a few war relics); the new *Public Library* (Pl. C, 4), between Acoma and Bannock Sts.; the *U. S. Mint* (Pl. C, 4), at the corner of Cherokee St.; and the *W. Side Court House* (Pl. B, 4). — The County Court House (Pl. C, 3) occupies the block bounded by Court Place and 15th, 16th, and Tremont Sts. — The Custom House and Post Office (Pl. C, 3), 16th St., is another imposing building. — In 14th St. is a handsome *Auditorium* (Pl. B, C, 3; 12,000 seats), used by the Democratic Convention in 1908. It can be converted into an opera house.

The other important buildings of the city include the **Denver High School* (Pl. C, 2, 3), Stout St., betw. 19th and 20th Sts.; the *City Hall* (Pl. B, 3), cor. 14th and Larimer Sts.; the *Mining Exchange* (Pl. B, C, 3); the *Chamber of Commerce* (Pl. 3, B 3; with the *Mercantile Library*); the *Baptist College* (Montclair); the *Tabor Opera House Block* (Pl. 5; C, 3); the *Broadway Theatre* (Pl. 1; C, 3); the *Denver Athletic Club; Trinity Church* (Pl. C, D, 3), Broadway and 18th St.; the *Church of Christ, Scientist*, 14th & Logan Aves. (Pl. D, 4); the *Y. M. C. A.* (Pl. D, 3), Lincoln and 16th Aves.; *Mystic Shrine Temple*, Sherman and 18th Aves. (Pl. D, 3); the *Westminster University of Colorado;* and the Jesuit *College of the Sacred Heart* (College Ave., cor. of Homer Ave.). — On Capitol Hill (beyond Pl. F, 3) are the new buildings of *St. Mary's Cathedral* (R. C.) and *St. John's Cathedral* (Episc.). The *Art Museum*, in *Montclair* (see below), contains a collection of paintings and other objects of art. The *Museum* in the City Park includes an interesting collection of Colorado animals. In University Park, 8 M. to the S.E. of the Union Depot, is the *University of Denver* (1300 students). About 4 M. off in nearly the same direction (4th Ave. car-line) is the *Denver Country Club*.

A visit should also be paid to one of the great Smelting Works of Denver, among which may be mentioned the *Boston & Colorado* (at *Argo*, p. 473) and the *American Smelting & Refining Co. (Grant Smelter)*, both to the N. of the city.

A good idea of Denver's suburban growth is obtained by taking the electric tramway at the end of the 17th Ave. electric line and going to the E. over *Capitol Hill* (fine residences) and through *Montclair* to *Aurora*. — Visits may also be paid by electric or cable cars to *Elitch's Zoological Garden* (adm. 25 c.), *Berkeley Lake* and *Park*, and *Manhattan Beach*. — The '*Seeing Denver*' *Observation Cars* (comp. p. 19) start from the Brown Palace Hotel (fare 50 c.; 2 hrs.), taking two distinct routes, the 'Scenic Section' and the 'Residence Quarter'. The '*Seeing the Foothills*' *Cars* cover a distance of 50 M. (fare $1). — Horse Races are held at *Overland Park*, to the S. of the city (S. Broadway cars).

Denver was one of the first cities to adopt the interesting principle of a separate court for juvenile offenders (comp. p. 53), and its *Children's Court* (Judge B. B. Lindsey) has been singularly successful.

Denver is a good centre for numerous excursions, a few of which are enumerated below. Comp. also p. 488 (Colorado Springs, Denver & Rio Grande R. R.) and p. 427.

FROM DENVER TO GOLDEN, CENTRAL CITY, AND SILVER PLUME, 54 M., *Colorado & Southern Railway* in 3¾ hrs. (fare $ 2.55). Observation-cars are attached to the trains. — Beyond (2 M.) *Argo* (5205 ft.) and (3 M.) *Utah Junction* we have a good retrospect of Denver, with Pike's Peak (p. 491) in the distance. To the E. is the *Platte River*, to the W. rise the *Rocky Mts.* Farther on we descend into the *Clear Creek Valley*. At (8 M.) *Arvada* we turn to the W. — 16 M. Golden (5695 ft.; *Avenue, Crawford*, from $ 2), at the base of the *Table Mts.*, is a small industrial and mining city, with 2152 inhabitants. We now ascend the picturesque **Clear Creek Canyon*, where the cliffs are sometimes 1000 ft. high. 24 M. *Elk Creek*. — 29 M. *Forks Creek* (6895 ft.; Rail. Restaurant), at the confluence of the N. and S. branches of Clear Creek, is the junction of the line to *Central City* (see below). — The Silver Plume train follows the South Clear. 37 M. Idaho Springs (7555 ft.; *Beebe, Hôtel de Paris*, $ 2), in the midst of a gold and silver mining district, is frequented for its hot and cold mineral springs (large baths). An excursion may be made to (13 M.) **Chicago Lakes* (11,500 ft.). — We continue to ascend rapidly.

50 M. Georgetown (8475 ft.; *Hôt. de Paris*, from $ 2½), a silver-mining town with 1418 inhab., is also frequented as a summer-resort on account of its pure air and beautiful environment. Excursions may be made to (3 M.) *Green Lake* (10,400 ft.; hotel), *Clear Lake* (3½ M.), *Elk Lake* (6 M.), etc. — Above Georgetown the train threads the *Devil's Gate* and climbs up the mountains by means of the famous **Loop*, where it bends back on itself and crosses the track just traversed by a lofty bridge (8770 ft.). A little higher up it makes two other sweeping curves. — 54 M. *Silver Plume* (9175 ft.; Windsor Hotel, $ 1½-2½) is now the terminus of the railway.

At either Silver Plume or Georgetown horses may be hired for the ascent of **Gray's Peak* (14,340 ft.; 4-5 hrs.), one of the loftiest of the Rocky Mts. The *View is superb, including in clear weather Long's Peak (see below) and Pike's Peak (p. 491). *Torrey's Peak* (14,335 ft.) and *Mt. McClelland* (13,425 ft.; mountain railway, with through-cars from Denver; return-fare $ 4½) may also be ascended.

[The line from Forks Creek to Central City (see above; 11 M., in 55 min.) ascends the *North Clear Creek*, passing numerous quartz mines. Beyond (7 M.) *Black Hawk* (8045 ft.) it overcomes the heavy gradient by long 'switchback' curves. — 11 M Central City (8515 ft.; *Teller*, $ 2-3), a busy little mining city, with 3114 inhabitants. An ascent may be made of *James Peak* (13,280 ft.; *View), and a pleasant walk or ride may be taken to (6 M.) *Idaho Springs* (see above) viâ *Bellevue Hill* (view of the Front Range).]

FROM DENVER TO BOULDER AND FORT COLLINS, 74 M., *Colorado & Southern Railway* in 2½-3 hrs. (fare $ 2.70). Beyond (3 M.) *Utah Junction* (see above) the train runs to the N. to (30 M.) Boulder (5335 ft.; *Boulderado*, from $ 3; *O'Connor*, $ 3; *St. Julian*, $ 2), a growing residential city (6150 inhab.) and the site of the *University of Colorado* (1050 students), at the mouth of **Boulder Canyon*, which may be visited by carriage (to the *Falls*, 9 M., and back, $ 5). Other drives may be made from Boulder to the picturesque *Gregory* (or *Flagstaff*) and *Sunshine Canyons*, the former the home of the 'Colorado Chautauqua' (comp. p. 232). Boulder is connected with Denver by an electric car-line. A branch-line runs from Boulder to (26 M.) *Ward* (9450 ft.) and (34 M.) *Eldora* (8730 ft.), in the tungsten belt, producing more than half the world's supply of that metal, besides gold, silver, and copper. — Beyond Boulder our line ascends to (44 M.) *Longmont* (4935 ft.; Imperial, $ 2-3; huge pea-cannery) and (61 M.) *Loveland* (4970 ft.; Loveland Ho., Bushnell, $ 2). From the latter an automobile-stage runs in 3 hrs. to (24 M.) Estes Park (6810 ft.; *Elkhorn Lodge*, $ 3; *Estes Park*, $ 2½), a smaller edition of the Great Natural Parks. [Estes Park may also be reached from Denver by the Burlington & Missouri River R. R. to *Longmont* (see above) and (48 M.) *Lyons*, whence stages run to (20 M.; 5 hrs.) the hotels.] Long's Peak (*Long's Peak Ho.*, $ 2-3½; 14,270 ft.) rises on the

S. side of the park and may be ascended from the Estes Park Hotel in 4-6 hrs. (guide necessary; fatiguing); the *View includes a large section of the Rocky Mts. For the ascents of other mountains around Estes Park, see *F. H. Chapin's* 'Mountaineering in Colorado'. — Beyond Loveland the train runs on to (74 M.) *Fort Collins* (4970 ft.; views), connected by railway with (25 M.) *Greeley* (p. 475) and with *Colorado Junction.*

From Denver to Leadville. 151 M., *Colorado & Southern Railway* in 9¼ hrs. (fare $ 8). — The line runs to the S., crossing the *Platte River.* 8 M. *Sheridan Junction* (5285 ft.), with *Fort Logan.* About 12 M. farther on we reach the **Platte Canyon* (5490 ft.; Hotels, $ 2-2½) and begin to ascend rapidly. 29 M. *South Platte* (6085 ft.); 32 M. *Dome Rock* (6200 ft.); 42 M. *Pine Grove* (6740 ft.). The grade contracts. 52 M. *Estabrook* (7550 ft.), a summer-resort; 66 M. *Grant* (8555 ft.), at the W. end of the Platte Canyon. The line curves nearly back upon itself as we approach the summit at (76 M.) *Kenosha* (9970 ft.). As we begin to descend we have a fine *View of South Park (p. 475). — At (88 M.) *Como* (9775 ft.; Rail. Restaurant) the Leadville line diverges to the right from that to Gunnison (see below). We now again ascend rapidly, passing several old placer-workings. 94 M. *Halfway* (10,530 ft.). At (99 M.) *Boreas* (11,470 ft.), at the summit of the *Breckenridge Pass*, we reach the culminating point of the line, on the Continental watershed of the Rocky Mts. The descent is abrupt and tortuous. 110 M. *Breckenridge* (9525 ft.; Denver Hotel, $ 3), on the *Blue River.* To the W. and S.W. rise *Mts. Fletcher*, *Quandary*, *Buckskin*, and other peaks; to the N., *Gray's Peak*, *Torrey's Peak*, and *Mt. Powell.* Gold-mining is actively carried on all along this part of the route. — Beyond Breckenridge we descend to the N., along the Blue River. 116 M. *Dickey* (8980 ft.), junction for (7 M.) *Keystone.* Farther on we pass through the *Ten Mile Canyon.* 135 M. *Robinson* (10,820 ft.), in a rich mining district. To the left towers *Mt. Fletcher* (14,265 ft.). To the N.W. rises the famous **Mt. of the Holy Cross** (14,170 ft.), so called from the cruciform appearance presented by two snow-filled ravines which cross each other at right angles (best seen from a point on the road to the W. of Robinson). — At (137 M.) *Climax* (11,330 ft.) we reach the top of Fremont's Pass and begin to descend. 145 M. *Bird's Eye* (10,635 ft.). — 151 M. *Leadville* (10,185 ft.), see p. 498. Leadville is also reached from Denver viâ the D. & R. G. and Col. Midland R. R. (comp. pp. 495, 498).

From Denver to Gunnison and Baldwin, 219 M., *Colorado and Southern Railway* in 5 hrs. (fare to Gunnison $ 8.95, to Baldwin $ 9.30). — From Denver to (88 M.) *Como*, see above. Our line continues to run towards the S.W., through *South Park*, surrounding or flanking the rocky spurs sent out by the loftier mountains. 105 M. *Garos* (9170 ft.) is the junction of a branch-line to (10 M.) *Fairplay* (9885 ft.) and (16 M.) *Alma* (10,230 ft.), both near the centre of *South Park* (p. 475). — The valley widens. 114 M. *Platte River* (8935 ft.). From (120 M.) *Bath* or *Hill Top* (9460 ft.) we obtain a view of the *Sawatch* or *Saguache Range*, separating the Gunnison and San Juan country from the valley of the Arkansas and culminating in *Blanca Peak* (14,390 ft.), the highest of the Rockies. We descend rapidly. 127 M. *McGee's* (8650 ft.). — 133 M. *Schwanders* (7815 ft.) is the junction of a line to (4 M.) *Buena Vista* (7945 ft.). About 8-10 M. to the W. of Buena Vista are the three 'Collegiate' peaks of the Saguache Range: *Mts. Yale* (14,185 ft.), *Princeton* (14,190 ft.), and *Harvard* (14,375 ft.). Near their bases are *Cottonwood Hot Springs* (6 M. from Buena Vista: stage). — Beyond Schwanders we cross the Denver & Rio Grande R. R. (R. 77a). 142 M. *Mt. Princeton Hot Springs* (8170 ft.; Hotel, well spoken of; mountain to the right); 153 M. *St. Elmo* (10,040 ft.). About 6 M. beyond (156 M.) *Romley* (11,005 ft.) we reach the **Alpine Tunnel** (11,600 ft.), 590 yds. long, one of the highest pieces of railway in the world. We cross the Continental Divide in the middle of the tunnel and begin to descend towards the Pacific. The *View on emerging from the tunnel includes the *San Juan Mts.* (150 M. to the S.W.), the *Uncompahgre Range* (p. 496), the valley of the *Gunnison*, the *Elk Mts.* (right), and (in the foreground) *Mt. Gothic* and *Crested Butte.* The line runs along a narrow ledge, with perpendicular rocky walls on the one side and the deep valley on the other. The descent

is very abrupt. 175 M. *Pitkin* (9180 ft.); 190 M. *Parlin's* (7910 ft.). — At (202 M.) **Gunnison** (7650 ft.) our line meets the *Denver and Rio Grande Railroad* (see p. 496). — 219 M. *Baldwin.*

[**South Park** (p. 474), separated from Middle Park (see below) by a range of lofty mountains, has a mean elevation of about 9000 ft. and an area of 2000 sq. M. Its climate is milder than that of the Parks to the N., and the railways make it more accessible. Numerous excursions may be made from *Fairplay* (p. 474), one of the finest of which is the ascent of *Mt. Lincoln (14,295 ft.), easily accomplished (carriages available nearly to the top). The mountain-view is very grand and extensive. The beautiful **Twin Lakes* (9330 ft.), at the E. base of the Saguache Range, are most easily reached from *Granite* (p. 495).]

One of the finest excursions that can be made from Denver is that arranged by the *Denver & Rio Grande Railroad* under the name of AROUND THE CIRCLE, OR 1000 M. THROUGH THE ROCKY MTS. (fare $ 23; tickets available for 60 days). On this round we cross and recross the Great Divide, thread four wonderful canyons, surmount four mountain-passes (one by coach), reach a height of 11,000 ft., and pass through some of the grandest scenery in America. The round may be accomplished in 4 days, with halts for the night at Durango, Silverton, and Ouray; but it is better to spend a much longer time on it and make various side-trips. It may be made in either direction. — The different sections of this circular tour are described elsewhere. From Denver to *Colorado Springs*, *Pueblo*, and (170 M.) *Cuchara Junction*, see R. 77a; from Cuchara Junction to *Durango*, *Silverton*, and (345 M.) *Red Mountain*, see pp. 492-494; from Red Mountain to (8 M.) *Ouray* (stage), see p. 494; from Ouray to (35 M.) *Montrose* and back to (352 M.) *Denver*, see pp. 496-488. [Those who prefer to omit the stage-ride may go on by railway from Durango to *Dolores*, *Ophir Loop*, *Dallas Divide*, and *Ridgway*, where they rejoin the 'Circle' as above described (comp. p. 493.)]

FROM DENVER TO MCCOY, 157 M., *Denver*, *N. W.*, *& Pacific Railway* ('Moffat Road') in 9 hrs. (return-fare $ 9½). This line, diverging at (3 M.) *Utah Junction* (p. 473) from that to Fort Collins, will soon be opened to *Steamboat Springs* (Onyx Hotel, $ 2½), 47 M. beyond McCoy, whence it will be advanced to Salt Lake City (p. 499). — Beyond (47 M.) *Tolland* (Toll Inn, $ 2½), in *Boulder Park*, the line ascends in windings to (65 M.) *Corona* (11,660 ft.), where it crosses the Rocky Mts. at the highest point attained by any standard-gauge railway. The *Scenery is of the grandest description, and the tourist is recommended to make at least the one-day round trip to (77 M.) *Arrow* (9585 ft.; Lininger Ho., $ 2; return-fare $ 5). The railwao traverses Middle Park, the second of the great Natural Parks of Colorady mentioned at pp. 460, 461. Middle Park, the only one on the W. side of the 'Continental Divide', has a mean elevation of about 7500 ft. and an area of 3000 sq. M. It is a noted resort for sportsmen in search of big game. 109 M. *Hot Sulphur Springs* (7650 ft.; Grand, $ 2-3; Middle Park, $ 2), in Middle Park, with water efficacious in rheumatism, neuralgia, and cutaneous affections. Near (130 M.) *Gore Canyon* the scenery is, perhaps, at its best. — 157 M. *McCoy* (Hotel, from $ 1½).

FROM DENVER TO LA JUNTA, 183 M., *Atchison*, *Topeka*, *and Santa Fé R. R.* in 6-7 hrs. (fare $ 6.35). Through-carriages run by this route to Kansas City, to Chicago, and to Californian and Mexican points. — From Denver to (119 M.) *Pueblo* this line runs parallel with the Denver & Rio Grande Railroad (see R. 77a), passes the same stations, and enjoys the same scenery. — Beyond Pueblo it strikes off towards the S.E. — 183 M. *La Junta*, see p. 477.

At Denver the San Francisco line turns sharply to the right and runs to the N., along the *S. Platte River* and parallel with the Rocky Mts., 30-40 M. to the W. (fine views to the left). — From (658 M.) *Brighton* (4970 ft.) a branch-line runs to *Boulder* (p. 473). — 686 M. *La Salle* (4665 ft.), the junction of a line to *Julesburg* (p. 460); 691 M. *Greeley* (4635 ft.; Camfield Hotel, $ 3-4), the source of the 'Greeley potato', a thriving town of 3023 inhab., on the

Cache la Poudre River (line to *Fort Collins*, see p. 474). Considerable quantities of 'alfalfa' or 'lucerne' (a kind of clover) and other crops are grown all along this line on land which is perfectly barren without irrigation.

746 M. *Cheyenne* (6050 ft.), and thence to —

2014 M. **San Francisco**, see pp. 460-466.

b. Viâ Atchison, Topeka, and Santa Fé Railway.

2116 M. Railway in 63 hrs. (fare $ 50, second class $ 40; sleeper $ 11.50, tourist-car $ 5.75). Through-carriages run from Chicago to San Francisco by this route (2276 M.) in 75 hrs. (fare $ 62.50, second class $ 52.50; sleeper $ 14, tourist-car $ 7). A large part of the district traversed is semi-arid, but some points of considerable interest are passed (see pp. 477, 478), while the wonderful *Grand Canyon of the Colorado* is most easily reached from Williams (p. 480).

Kansas City, see p. 423. The line runs to the W., along the S. side of the *Kansas River*, and ascends steadily. At (14 M.) *Holliday* (760 ft.) we are joined by the branch from *Leavenworth* (p. 470). 40 M. *Lawrence* (p. 470). At (67 M.) **Topeka** (885 ft.; p. 470) we are joined by the branch from *Atchison* (p. 423) and bend to the S. We now pass through a prosperous district with many small towns. 93 M. *Burlingame* (1040 ft.), with its country-club; 101 M. *Osage City;* 128 M. *Emporia;* 148 M. *Strong City*; 173 M. *Florence;* 185 M. *Peabody* (1350 ft.). — 201 M. *Newton* (1440 ft.; Arcade Hotel, from $ 3), the junction of a line running S. to *Galveston*, is the centre of the Mennonite settlements, made up of over 100,000 industrious German and Russian Quakers, who have immigrated since 1874.

From Newton to Galveston, 750 M., *A. T. & S. F. Railway* in 30 hrs. — Among the most important intermediate stations are (27 M.) *Wichita* (24,671 inhab.; Carey Hotel, $ 1¾-2); 43 M. *Mulvane;* 65 M. *Winfield* (8094 inhab. in 1907; St. James, $ 2), near the huge Wichita Game Preserve (buffalo, etc.); 79 M. *Arkansas City* (1065 ft.; Rail. Restaurant), a flourishing place with (1907) 8116 inhabitants. We now cross the *Arkansas River* and enter Oklahoma (the 'Boomers' Paradise'), created a state (including Indian Territory) in 1907. It has an area of 69,830 sq. M. and a population (1907) of 1,414,217 (an increase of 78 per cent over 1900), including about 50,000 Indians. The rush across the border as soon as the new territory was opened has become historical, tent towns with thousands of inhabitants springing up in a single day. Oklahoma is preëminently an agricultural and cattle-breeding district, and the development of agriculture since 1890 has been extraordinary. The produce includes maize, wheat, cotton, and fruit. Its coal-fields are also very extensive and valuable. — 92 M. *Newkirk*. Near (104 M.) *Ponca City* (hotel) is the White Eagle Agency of the Ponca Indians. 139 M. *Perry*. — 168 M. Guthrie (930 ft.; *Ione*, $ 2½-4; *Elks*, $ 2-2½), the capital of Oklahoma, is a busy little place with 21,000 inhabitants. — 199 M. **Oklahoma** (*Lee*, *Threadgill*, from $ 2½), founded in 1889, had 45,000 inhab. in 1907. A side-trip may be made hence to *Shawnee*, with its Kickapoo bark-lodges. At (232 M.) *Purcell* we cross the *Canadian River* and enter the old *Indian Territory*, a tract of about 31,000 sq. M., set apart for the Indian tribes to the E. of the Mississippi but now included in the State of Oklahoma (see above and comp. also p. 424). The chief civilized tribes located here are the *Cherokees*, *Chickasaws*, *Seminoles*, *Creeks*, and *Choctaws*, and these 'Five Nations' have long enjoyed a considerable measure of Home Rule. Under the new State constitution these Indians will continue more or less in the position of wards of the National Government for the

next 25 years, after which they will assume the status of ordinary citizens. An inalienable homestead of 160 acres has been reserved for each Indian. Farming is the chief occupation, but as a rule the Indians rent their lands to white cultivators. — We now traverse the lands of the Chickasaw Nation, crossing the *Washita* two or three times. 254 M. *Paul's Valley;* 266 M. *Ardmore* (p. 424). Beyond (325 M.) *Thackerville* we cross the *Red River* and enter *Texas* (p. 552). 339 M. *Gainesville;* 405 M. Fort Worth (see p. 637); 432 M. *Cleburne* (Rail. Restaurant), the junction of a line to *Dallas* (p. 637). From (496 M.) *McGregor* a line runs to (20 M.) **Waco** ('Geyser City'; *McClelland Ho.*), with 20,686 inhab., warm artesian wells, and a large natatorium. 531 M. *Temple Junction* (Rail. Restaurant); 576 M. *Milano*, the junction of a line to *Austin* (p. 594); 608 M. *Somerville;* 684 M. *Rosenberg Junction;* 721 M. *Alvin.* — 750 M. *Galveston*, see p. 594.

211 M. *Halstead* (1385 ft.); 236 M. *Hutchinson* (1525 ft.), with a trade in salt. We now follow the general course of the *Arkansas River* (left). passing through a good agricultural and cattle-raising district. 276 M. *Ellinwood* (1780 ft.); 333 M. *Kinsley* (2160 ft.). At (369 M.) **Dodge City** (2475 ft.; 3742 inhab. in 1907; comp. p. 487) we change from 'Central' to 'Mountain' time (1 hr. slower; comp. p. xiv). 419 M. *Garden City* (2825 ft.). — Beyond (485 M.) *Coolidge* (3360 ft.) we enter *Colorado* (p. 471). 496 M. *Amity*, with a flourishing Salvation Army Colony, owning 12,000 acres of fertile prairie land; 519 M. *Lamar* (3600 ft.). Farther on the *Rocky Mts.* begin to come into sight in front, to the right. — 571 M. **La Junta** (pron. 'La Hoonta'; 4060 ft.), a place of 2513 inhab., is the junction of the line from Denver described at p. 475. *Pike's Peak* (p. 491) is seen to the right. Our line runs towards the S.W. — 653 M. **Trinidad** (5995 ft.; **Cardenas*, at the station, $ 3-4; *Columbian*, from $ 3, R. from $ 1), the industrial and commercial centre of S.E. Colorado, is a thriving city of 5345 inhab., in which the characteristics of old Mexico and young America are inextricably mixed (comp. p. 478).

At (662 M.) *Morley* (6745 ft.) we begin to ascend the *Raton Mts.*, which form a conspicuous feature in the views from Trinidad. The gradient is steep. Fine views, especially of the *Spanish Peaks* (p. 492; right). At the top of the pass (7620 ft.) we pass through a long tunnel and enter *New Mexico* (p. 493). The descent is also rapid. 676 M. *Raton* (6620 ft.). The line runs through the central valley of New Mexico, about 20 M. wide, which is traversed by the *Rio Grande del Norte* and several other streams, and flanked by mountains 6000-10,000 ft. high. Agriculture is carried on in the side-valleys and plains by careful irrigation, but the greater part of the Territory is better adapted for grazing. — 742 M. *Wagon Mound.* — From (787 M.) **Las Vegas** (6380 ft.; *Castañeda*, $ 3½-5), an important wool-market with 3552 inhab., on a fork of the *Pecos River*, an electric railway runs to (6 M.) *Las Vegas Hot Springs.*

Las Vegas Hot Springs (6770 ft.; **Montezuma Hotel*, $ 3½-6), about 40 in number, lie on the S.E. slope of the Santa Fé range of the Rocky Mts. and vary in temperature from 75° to 140° Fahr. The water resembles that of the Arkansas Hot Springs (p. 590) and has similar results. It is used both for bathing and drinking. Mud-baths are also used ($ 3, including massage). Many pleasant excursions can be made in the vicinity. The mean annual temperature is 59° Fahr. (summer 73°).

Near (832 M.) *Rowe* lies (r.) the curious old *Pecos Church*, a relic of a Franciscan mission, dating from early in the 17th cent. and abandoned in 1840. Farther on we cross another ridge by the *Glorieta Pass* (7430 ft.) and descend to (851 M.) *Lamy Junction* (6460 ft.; hotel), where the line to (18 M.) *Santa Fé* diverges to the right.

[**Santa Fé** (7040 ft.; *Palace Hotel*, $ 2½-3; *Clare*), the capital of New Mexico, is, next to St. Augustine (p. 615), the most ancient town in the United States, having been founded by the Spaniards in 1605, while the site was occupied long before this by a village of the Pueblo Indians (p. lxii). It is in many ways a most quaint and interesting place, with its narrow streets, adobé houses, and curious mingling of American, Mexican, and Indian types. It lies in the centre of an important mining district and carries on a considerable trade. Pop. (1900) 5603. The focus of interest is the *Plaza*, or public square, with a *Soldiers' Monument*. On one side extends the *Governor's Palace*, a long low structure of adobé, which has been the abode of the Spanish, Mexican, and American governors for 300 years. It harbours the *Museum of the New Mexico Historical Society*, containing old Spanish paintings, historical relics, and Indian curiosities. The *Cathedral of San Francisco*, a large stone building with two towers, incorporates parts of the old cathedral, dating from 1622. The *Church of San Miguel*, originally built in 1622, was destroyed by Indians in 1680 and restored in 1710. Other points of interest are the new (now abandoned) and the old *Fort Marcy*, *San Miguel College*, and the *Ramona Industrial School for Indian Children*. Among the chief modern structures are the *State Capitol* and the *Federal Building*. A visit should be paid to the makers of Mexican silver filigree-work, whose shops are mainly in or near the Plaza. Gen. Lew Wallace (1827-1905) wrote 'Ben-Hur' in the Palace, while Governor of New Mexico (1879-82). — About 9 M. to the N.W. of Santa Fé is the interesting pueblo of the *Tesuque Indians*, who visit the city daily, bringing firewood on their 'burros' (donkeys). From Santa Fé to *Española* and *Antonito*, see p. 492.]

Near (882 M.) *Thornton* (5245 ft.), on the *Rio Grande*, are the pueblos of *Santo Domingo* (grand festival on Aug. 4th) and *San Felipe*. We now follow the bank of the large and rapid Rio Grande.

919 M. **Albuquerque** (4930 ft.; **Alvarado*, $ 3-5, connected with the station by an arcade), with 6238 inhab. and a brisk trade in wool and hides, is the connecting-point with the Santa Fé line to *El Paso* and *Mexico*, though the actual point of divergence is 13 M. farther on (see p. 479). The *Railway Station* and the *Alvarado Hotel* are built in the picturesque Spanish Mission style; the latter contains an interesting collection of the 'Arts and Crafts' of the Moki, Zuñi, Navajo, Apache, and Pima Indians.

From Albuquerque to El Paso, 253 M., railway in 9-10 hrs. Through-sleepers run viâ this route from Kansas City to El Paso, connecting with the Mexican Central Railway (comp. p. 591). — We diverge from the line to California at (13 M.) *Isleta Junction* (see below) and run towards the S. 30 M. *Belen* (4795 ft.). The mezquite (*Prosopis juliflora*) now begins to appear. 75 M. *Socorro;* 86 M. *San Antonio;* 103 M. *San Marcial* (*Rail. Restaurant); 141 M. *Engle.* 176 M. *Rincon* (4050 ft.; Rail. Restaurant) is the junction of a line to (53 M.) *Deming* (p. 552). 209 M. *Las Cruces.* — 253 M. El Paso, see p. 591.

Shortly after leaving Albuquerque we begin to see evidence of an ancient black lava flow, which continues for many miles, but does not equal the larger flow beyond McCarty's (see below). The main route continues due W., while at (932 M.) *Isleta* (see above), a pueblo with 600 Indians, the line to *El Paso* diverges to the S. We leave the Rio Grande, and run through a semi-arid and monotonous country, which, however, makes some response to irrigation. The curious-looking *Yucca* is now seen; this and the *Artemisia* are often the only vegetation in the desert, though the foothills are dotted with groves of piñon and cedar. At (985 M.) *Laguna* (5765 ft.) the railway runs through an Indian pueblo, the houses of which are built in terraces two and three stories high. This is the most modern of the pueblos, its foundation dating from 1699.

Visitors to this pueblo find accommodation in the house of one or other of the four or five white families here. The Indians, some of whom have been educated at Carlisle (p. 189) and speak good English, welcome visitors and offer hand-made pottery for sale. Their houses are of stone, plastered with adobé, and some of them are entered, with the aid of ladders, through the roofs. The Roman Catholic adobé church is nearly two centuries old. — About 16 M. to the S.W. of Laguna lies *Acoma*, the most interesting of all the pueblos, discovered by Coronado in 1540. In situation it is as striking as in structure, being 'nobly perched on the plateau of a huge rock elevation' (carr. there and back $ 5; for 3 or more pers. $ 2 each; blankets and light camp-outfit desirable).

Between Laguna and Acoma, 3 M. to the E. of the latter, rising precipitously 430 ft. above the valley, is the so-called *Mesa Encantada*, or 'Enchanted Table-land' (reached by ladders and ropes). This was scaled by *F. W. Hodge* in 1897 and found to bear evidence of former aboriginal occupancy, thus verifying a tradition of the Acomas that their ancestors lived on the height, but were forced to abandon their village after a storm had destroyed the only trail, and caused those left on the summit to perish. Comp. papers by *Oscar C. S. Carter* in the 'Journal of the Franklin Institute' (June & Dec., 1906).

Beyond Laguna *Mt. Taylor* or *San Mateo* (11,388 ft.), the loftiest mountain in New Mexico, is seen to the N. (right). Between (1002 M.) *McCarty's* and (1015 M.) *Grant's* the railway follows a stupendous flow of black lava (comp. above). About 30 M. farther on we pass the Continental Divide (7248 ft.), but there is nothing in the surroundings to suggest that we have reached so high an elevation or are passing from the Atlantic to the Pacific slope. — 1065 M. *Wingate* (6715 ft.), 3 M. from *Fort Wingate.* — 1077 M. *Gallup* (6480 ft.; Rail. Restaurant), with large coal-mines, is the supply station for *Fort Defiance* (stage $ 2½) and the Agency of the great *Navajo* ('Náhvaho') *Indian Reservation*, which lies at some distance to the N. of the line. Indians may be seen at the railway-stations, selling fine Navajo blankets, silver-work, and other home-made articles.

Gallup is also the usual starting-point for a visit to the famous pueblo of Zuñi, which lies about 40 M. to the S. (carr. there and back $ 10, 2-4 pers. $ 15), and for that across the 'Painted Desert' to (70 M.) *Chico*, with the largest group of prehistoric stone houses in the South-West.

Beyond (1093 M.) *Manuelito* (6230 ft.) we enter the *Territory of Arizona* ('Sunset Land'). — 1131 M. *Navajo Springs.* 1151 M. *Adamana* (Forest Hotel, $ 2½); 1172 M. *Holbrook* (5050 ft.; *Brunswick*, $ 2½).

From Adamana a visit may be paid to the extraordinary Petrified or Chalcedony Forests of Arizona, the most accessible of which lies about 6 M. to the S. (carr. there and back in 6-7 hrs.; fare $ 4, two or more pers. $ 2½ each). These forests are also visited from Holbrook. The trip to the largest of them, known as the *Third Forest* (about 15 M. to the S.), requires a day, and necessitates a stop-over at Holbrook of two nights (carr. there and back $ 2½ each). The petrified trees, 3-10 ft. in diameter and 80-100 ft. in length, date from the Mesozoic era, and are either embedded in the sandstone and shale of the mesas or lie broken on the plateau whence the softer rocks have disappeared by erosion. The longest, 110 ft. in length, forms a natural bridge of agate over a ravine between two mesas. Comp. paper by *Oscar C. S. Carter* in the 'Journal of the Franklin Institute' (April, 1904). — The seven *Moki* or *Hopi Villages*, the ancient 'Province of Tusayan', are also visited from Holbrook; the famous 'Snake Dances' occur in the latter half of August.

1205 M. *Winslow* (4855 ft.; Rail. Restaurant). Farther on we Coss a bridge, 540 ft. long and 222 ft. high, spanning the (1230 M.) *cranyon Diablo.*

1263 M. *Flagstaff* (6935 ft.; Weatherford, $ 2½-3) was the starting-point of the old stage-route to (70 M.) the *Grand Canyon of the Colorado* (see p. 481).

To the N. rise the San Francisco Mts. (12,794 ft.), extinct volcanoes, surrounded by a district of cinder cones and lava beds, like the Phlegræan Fields of Italy. The one known as *Humphrey's Peak* may be ascended with little trouble (7 M. by carriage and 3 M. in the saddle). It affords an extensive View of the N. wall of the Canyon, the Navajo and Buckskin Mts., the 'Painted Desert', and the Moki Buttes and villages. — The *Percival Lowell Observatory* is visible from the train, to the N.W. of the town, and visitors are made welcome.

Driving excursions from Flagstaff may be made to the *Cliff Dwellings* in *Walnut Canyon* (8 M. to the S.); to *Coconino Butte*, with cave-dwellings (9 M. to the N.E.); and to the *Natural Bridge* (275 ft. high; 60 M. to the S.).

1297 M. Williams (6725 ft.; *Grand Canyon Hotel*, $ 2½), a cattle- shipping point with about 1000 inhab., is the station for the branch-line to the Grand Canyon (see below). The traveller who stops over night may ascend *Bill Williams Mt.* (9265 ft.; 5 hrs., easy bridle-path). The alleged grave of the famous scout, who gave his name to the mountain and the town, is pointed out on the top, but he is really buried 50 M. to the S., where he was killed by Indians. To the N.W. rises *Mt. Floyd.*

From Williams to Grand Canyon Station, 63½ M., railway in 3 hrs. (return-fare $ 6.50; sleeper $ 2). There are two trains each way daily, leaving Williams, according to present time-tables, at 5.50 a.m. and 1.30 p.m., and Grand Canyon at 8.30 a.m. and 9 p.m. These connect with the transcontinental trains E. and W., and usually wait for them when they are

Not to be taken from the Library

Wagner & Debes' Geog. Estab. Leipzig
Powell's Plateau
COLORADO RIVER
Painted Desert
Bass's Camp
Cisterns
Ash Fork Road
Grand Canyon Sta.
Little Colorado R.
Cape Solitude
Dutton's Pt.
1: 3000.000
Stat. Miles
Kilom.
Paria Plateau
Lee Ferry
Kanab Plateau
Kaibab Plateau
Colorado River
Marble Canyon
Echo Cliffs
Painted Desert
Willow Spr.
Moencopie
Bass's Camp
Grand Canyon
Coconino
Apex
Anita
Hance Ranch
Red Butte
Red Horse Spr.
Valle
COLORADO PLATEAU
Mesa Butte
Black Falls
Grand Falls
San Francisco Mts.
S. Francisco Pk.
(Agassiz Pk.)
Coco. Butte
Mt. Floyd
Red Lake
Williams
Seligman
Ash Fork
Bill Williams Mt.
Flagstaff
Cañon Diablo
Garland Ranch
Aubrey Cliffs
Cataract Creek
Beale Wagon Road
Mokí Trail
Navajo & Moki Ind. Res.
Trinidad, Santa Fé
Los Angeles, S. Francisco
Prescott, Phoenix
112° W. of Gr.
Drippi
Cabin
Mt. Mount
Tle. Temple
Official Surveys

belated. A Pullman sleeper is attached to the west-bound 'California Limited' at Winslow and runs direct to the Canyon. The train leaving the Canyon at 8.30 a.m. has a through-sleeper for Los Angeles; and the train leaving at 9 p.m. has a sleeper which is transferred to the east-bound train at Williams.

Perhaps the most favourable season for this trip is in the early spring (April, May, or even June), before the hot season† and the rains of July and August arrive. In the winter months, preferably Dec. and Jan., while the keen, thin, cold air makes the driving and horseback excursions less agreeable, the effects given by cloud and snow under the brilliant skies are varied and striking. If possible, the stay here should be made under a full moon, and should be prolonged for a week at least.

From Williams the Canyon train runs to the N. over level tracts of sage-brush desert, stony land with dwarf junipers and pines, sparse bunch-grass, and, finally, pasturage. From (52 M.) *Apex* (6600 ft.) we descend viâ (58 M.) *Coconino* (comp. p. 480) to (63½ M.) *Grand Canyon Station.* Close by is the **El Tovar Hotel* (from $4), named from a companion of Coronado and standing almost on the edge of the canyon. Simple but comfortable accommodation may also be obtained at the *Bright Angel Camp*, ca. 200 yds. farther off (R. from 75 c.; meals à la carte). Near the El Tovar is a typical Hopi house, occupied by a few Hopi Indians, who sell blankets, pottery, and silver work. Beyond are two Navajo 'Hogans'.

The ***Grand Canyon of the Colorado**, one of the most stupendous natural wonders of the world, is 3000-5000 ft. deep and 217 M. long, following the river. Its ordinary width is about 10 M.; at El Tovar it measures 13 M. from the N. to the S. rim. The river, 300 ft. wide at its broadest, is 2400 ft. above the sea-level. The walls of the canyon, which are terraced and carved into a myriad of pinnacles and towers, are tinted with various brilliant colours. The canyon was first made specifically known to the world by Major Powell, late Chief of the U. S. Geological Survey, who in 1869 descended it by boat from the Green River (p. 497) to the *Virgin River*, a distance of 1000 M. He believes that the river was running here before the mountains were formed, and that the canyon was created by the erosion of the water acting simultaneously with the slow upheaval of the rocks. The geological student has unfolded to him, in the sides of the canyon, all the strata from the carboniferous formations down to the Archæan granite (comp. diagram on map).

Comp. *Major J. W. Powell's* 'Canyons of the Colorado' (1893), *Capt. Dutton's* 'Tertiary History of the Grand Cañon District' (Washington, 1882), *Fred. S. Dellenbaugh's* 'Romance of the Colorado River' (1903), and *Geo. Wharton James's* 'In and Around the Grand Cañon'.

There are two main trails by which the traveller can reach the bottom of the canyon, without danger though not without fatigue, either on foot or in the saddle. Horses and guides are supplied at the hotels. — 1. The *Bright Angel Trail*, 7 M. down from rim to river, requires 3 hrs. for the descent and 3½ hrs. for the return,

† The heat on the rim of the Canyon is seldom oppressive, though, of course, its depths become very warm.

with a stop for rest and luncheon (charge $4 each, including luncheon, horse, and guide). About halfway down is *Indian Gardens Camp* ($ 3; advisable to telephone). — 2. The *Grand View Trail* is reached by stage from Grand Canyon Station, leaving daily at 9 a.m., or by private conveyance from El Tovar Hotel (return-fare, $ 3) to the (13 M. to the E.) **Grand View Hotel*, a favourite summer stopping-place ($ 3-4 a day, $ 18-25 weekly). This was the terminus of the old stage-line from Flagstaff (p. 480). The altitude at this point (7496 ft.) permits vast outlooks up and down the river and canyon, and beyond its E. boundary wall. The trail, which begins about 1 M. to the N.W. of the hotel, descends to *Horseshoe Mesa*, halfway down the canyon, with a copper-mine (in operation), some limestone caves, and cottages where the night may be spent (rates the same as at Grand View Hotel). From Horseshoe Mesa three trails lead to the bottom of the canyon, two to *Granite Gorge;* but to reach the river by either of the latter it is necessary at present to descend the wall of the Granite Gorge on foot. This is difficult and seldom done, since the *View from the lower plateau overhanging the gorge is so satisfactory. The third trail runs upstream along the floor of the canyon and at the river connects with the Hance Trail (see below).

The *Hance* or *Red Canyon Trail* begins about 4 M. to the E. of the hotel (about 7 M. from rim to river). This trail does not touch the Granite Gorge, but reaches the river at a point a little above and gives access to a section of the canyon geologically different from the parts reached by other trails. An interesting trip of two or three days may be made by descending over the Grand View Trail (see above) and returning by the Hance Trail. Food is provided by the hotel at the daily rate, in addition to which each member of the party pays his proportionate share for the guide and pack animals and $ 3 for his mount.

The *Tanner Trail*, which leaves the rim about 15 M. to the E. of Grand View, is seldom used, but gives access to the bottom of the canyon near the union of the Marble and the Little Colorado Canyons.

The following points along the rim of the canyon (superb views) are best visited from the Grand View Hotel: *Grand View Point* (7406 ft.; 1½ M. to the N.); *Moran's Point* (5 M. to the N.E.), named from the artist, reached by carriage, but better visited by saddle-horse via the Rim Trail, which leads for 2 M. along the edge of the canyon; *Zuni (Bissell) Point* (7284 ft.; 7 M. to the N.E.); *Pinal (Hollenbeck) Point* (10 M. to the N.E.); *Lipan (Lincoln) Point* (12 M. to the N.E.); and *Navajo Point* (or *Desert View;* 18 M. to the N.E.), at the E. edge of the Coconino Plateau.

Other excursions from the Grand View Hotel may be made to the **Prehistoric Ruins* (6-12 M.); *Crater Mt.* (30 M.); the *Canyon of the Little Colorado* (30 M. to the N.E.); the **Painted Desert* and **Navajo Reservation.* The last excursion requires 5-7 days.

Some grand views are obtained by walking or driving from the El Tovar Hotel to *O'Neill's (Yavapai) Point*, 2½ M. to the E., and to *Rowe's (Hopi) Point*, 3 M. to the W. The latter may be included, by a short digression, in the drive to (21 M.) *Havasupai Point* and (24½ M.) *Bass's Camp* (6652 ft.), another point commanding a superb view of the canyon. *Bass's Trail* (ca. 7 M. in length), which begins

here, is of great interest to the geologist, though comparatively little used. It descends to the Colorado River, which is 215 ft. wide at this point. Crossing by boat, we may mount the N. bank to *Dutton's Point*, on *Powell's Plateau*, and to *Point Sublime* (7500 ft.). The view from these points 1000 ft. higher than the S. wall, is well worth this climb. At least four days are required for this trip from Bass's Camp and back.

Cataract Canyon and its *Indian Village* may be visited from Bass's Camp (30 M.), or direct from El Tovar Hotel (47 M.) by carriage to the edge of the canyon, where saddle-animals have to be taken for the last 12 M. — The *Boucher Trail*, which begins about 10 M. to the W. of El Tovar, is seldom used to the river, but *Dripping Springs*, 2 M. from the rim, and a point near by (*View) are frequently visited.

Before reaching (1320 M.) *Ash Fork* (5130 ft.; Hotel Escalante, from $ 4, well spoken of) we thread the rocky *Johnson's Canyon*.

From Ash Fork to Phœnix, 194 M., *Santa Fé, Prescott, and Phoenix Railway* in 9 hrs. — 39 M. *Jerome Junction*, for *Jerome*, with the huge *United Verde Copper Mines*; 57 M. *Prescott* (5300 ft.), in the midst of a rich mineral region; 123 M. *Congress Junction*, for *Congress*. Near (139 M.) *Wickenburg* is the equally rich *Vulture Mine*. From (150 M.) *Hot Springs Junction* a stage runs to (4 hrs.) *Castle Hot Springs* (2000 ft; Hotel, from $ 3), with mineral waters efficacious in rheumatism, anæmia, etc. — 194 M. Phœnix, see p. 551.

At (1347 M.) *Seligman* (5219 ft.; Rail. Restaurant) the time changes from 'Mountain' to 'Pacific' standard (1 hr. slower; comp. p. xiv). The country now becomes more broken, with wide lava beds and frequent rock-formations.

From (1385 M.) *Peach Springs* (Railway Restaurant; no hotel, but lodgings may be found) another trail (too hot for summer-travel) leads through the *Diamond Creek Canyon* to (23 M.) the *Grand Canyon* (p. 481), descending from a height of 4780 ft. to the level of the *Colorado River* (2000 ft.). The view is limited to the river and its opposite wall. Carriages may be obtained at Peach Springs.

At (1403 M.) *Tinnaka* we pass a Government Indian school on the right. 1408 M. *Hackberry* (3550 ft.), in a mining district. From (1435 M.) *Kingman* (Railway Restaurant) a branch-line runs to (26 M.) *Chloride*, whence stage and horseback routes lead to the rich mining districts of (28 M.) the *White Hills;* (51 M.) *Eldorado Canyon*, (66 M.) *Rioville*, (83 M.) *St. Thomas*, and (96 M.) *Overton*.

1485 M. *Pocock* is the last station in Arizona, and just beyond it we cross the wide *Colorado River* by a noble cantilever bridge 1100 ft. long, and enter *California*. 1497 M. *Needles* (Depot Hotel, $ 3) is so named from the curious pinnacles of purple porphyry and trachytic granite, which have been for many miles in sight, 15 M. to the S. Our train now runs to the W. across the great **Mojave Desert** ('Mohahvé'), an elevated sandy plateau, interspersed with salt lakes and alkali tracts, with little vegetation except yucca-palms,

small piñons (nut-pines, *Pinus monophylla*), junipers, and sage-brush. Mountains are seen to the N. in the distance.

From (1528 M.) *Goffs* a branch-line runs to the N. to (29 M.) *Barnwell* and (45 M.) *Ivanpah*. 1588 M. *Bagdad* (785 ft.; lunch-counter). From (1612 M.) *Ludlow* a branch-line runs to the S. to (8 M.) *Camp Rochester*, while the Tonopah & Tidewater R. R. runs N. to (241 M.) *Goldfield* and (272 M.) *Tonopah* (comp. p. 463). 1657 M. *Daggett* (comp. p. 504).

At (1666 M.) *Barstow* (2210 ft.; Rail. Restaurant, with rooms) the through-train divides, one section going to Los Angeles (see R. 76).

The main line to San Francisco continues to the W. through the Mojave Desert, here bordered by low mountains rich in minerals. — 1699 M. *Kramer* (2480 ft.).

From Kramer to Johannesburg, 28 M., in 1½ hr. — This line serves the mining district of *Randsburg*, producing gold, silver, copper, lead, platinum, antimony, sulphur, borax, asbestos, and fuller's earth. From (28 M.) *Johannesburg* stages run to *Ballarat* and *Randsbug*.

We now cross the vast bed of a dry lake, and at (1737 M.) *Mojave* we join the track of the Southern Pacific Railway, which our train follows to (1805 M.) *Bakersfield* (see p. 530). Beyond this point the Santa Fé Railway has its own line into San Francisco, more or less parallel with that of the Southern Pacific Railway (R. 82).

1870 M. *Corcoran* lies 2 M. to the E. of Tulare Lake (see p. 530). The country between here and the mountains on the E. and S. is partly inhabited by the Mariposa and Moquelumne Indians, whose hand-work, in bowls and baskets, is highly valued by collectors.

From Corcoran a loop-line runs to the E. and then to the N. and W., crossing *King's River* and regaining the main line at (71 M.) *Fresno* (see below). 25 M. Visalia (Palace Hotel, $2), on this loop, one of the earliest towns that was settled by Americans in the State (1852), is the most convenient starting-point for excursions to the High Sierra on the E. (see p. 530). An electric railway runs from Visalia to (20 M.) *Lemon Cove*, the starting point of the stages to (35 M.; 11 hrs.; fares $ 6½) the Sequoia National Park or Giant Forest (6500 ft.; *Camp Sierra*, $ 2, which lies in the High Sierra and contains splendid forests of sequoias, besides most remarkable gorges, peaks, and caverns. The tree named 'General Sherman' is 280 ft. in height and 95 ft. in girth. To the N. and W. is the *General Grant Park* (p. 530). To the N.E. are the canyons of the *King's River* ('a second Yosemite') and the *Kern River*, and *Mt. Whitney* (14,502 ft.), the highest peak in the country outside of Alaska. The ascent is somewhat difficult, but a splendid View is obtained from its summit. Parties are made up at Visalia and Camp Sierra and fitted out with animals, guides, and camping equipment, at a cost of $ 2½-3 a day.

1887 M. *Hanford*, a well-built little town, is the centre of a stock-raising, dairy-farming, and fruit-growing region. At (1895 M.) *Laton* are the offices of the *Laguna de Tache Ranch* of 60,000 acres. — 917 M. *Fresno*, also a station on the Southern Pacific line (p. 530).

Farther on we cross the *San Joaquin River* and many of its branches, traversing a land rich in grain and cattle. Beyond (1975 M.) *Merced* (p. 529) are vast fields of the famous 'Merced Sweets' (sweet potatoes or yams); here too, grows, the 'buhach', from which insect-powder is made. We cross the *Merced*, *Tuolumne*, and *Stanislaus*

rivers, the names of which recall Bret Harte's stories and poems; the great placer-mining district of the Argonauts of 1848 and 1849 stretches away to the N.E. Passing (2040 M.) *Stockton* (p. 465), we turn more to the W., with Mt. Diablo on the left, and the N. arm of San Francisco Bay (San Suisun and San Pablo Bays) on the right. After passing (2088 M.) *Muir*, the train crosses a huge viaduct, giving a grand view over *Alhambra Valley* to the above-named bays and the *Straits of Carquinez*. — 2099 M. *Pinole*. From (2107 M.) *Richmond* a branch-line runs to (11 M.) *Oakland* (p. 466), where connection is made for the 'Key Route Ferry' to San Francisco. The main line continues to (2109 M.) *Ferry Point*, whence the ferry carries us in 20 minutes, to —

2116 M. *San Francisco* (p. 509).

76. From Kansas City to Los Angeles.

a. Viâ Santa Fé Route.

Comp. Map, p. 535.

1807 M. Atchison, Topeka, and Santa Fé R. R. in 55 hrs. (fares, etc., as at p. 476). Through-carriages run by this route from Chicago to (2265 M.) Los Angeles (fare $ 62.50; sleeper $ 14, tourist-car $ 7) and to San Diego.

From *Kansas City* to (1666 M.) *Barstow* (p. 484), see R. 75 b.

From Barstow our line runs to the S., through the desert, following the course of the *Mojave River;* in the distance are seen dry lakes and extinct volcanic peaks. At (1711 M.) *Hesperia* are large groves of yucca. From (1722 M.) *Summit* (3820 ft.) we descend the *Cajon Pass*, with its stunted pines and scanty vegetation. To the W. are seen Mt. San Antonio (p. 486), to the E. (farther off) the peaks of San Bernardino (11,630 ft.) and San Gorgonio (11,485 ft.).

1747 M. **San Bernardino** (1075 ft.; *Stewart*, $ 2-3½; *St. Charles*, $ 2-2½), a town of (1900) 6150 inhab., well situated near the E. margin of the valley of its own name. It was originally laid out by Mormons in 1851, and has prospered as the railway-centre of a rich fruit-growing region. An electric car line runs to (5 M.) *Arrowhead Hot Springs* (2005 ft.; Hotel, R. from $ 1), on a level bench on the mountain-side, famous for their sulphur curative qualities, and another pleasant drive may be taken to the *Squirrel Inn*, on the crest of the mountains. San Bernardino is the junction of a line to *San Diego* and *National City* (see below).

From San Bernardino to (141 M.) San Diego and (147 M.) National City, railway in 5 hrs. At (4 M.) *Colton* (p. 550) this line crosses the Southern Pacific Railway. — 6 M. *Highgrove* is the junction of a branch-line to (18 M.) *Perris*, a small settlement supplying an agricultural and a mining district. [From Perris a line runs to (19 M.) *San Jacinto*, passing through a country that is one great grain-field. From (17 M.) *Hemet* on this latter line stages start for *Idyllwild* and *Strawberry Valley Lodge*, a favourite summer camping-ground in the San Gorgonio mountains. Near San Jacinto is the small Indian village of *Sobobo*, one of the scenes in ‚Ramona'. — From *Perris* another branch-line goes to (14 M.) *Elsinore*,

a summer-resort on the lake of the same name, with many hot springs of curative repute, in a mountainous region rich in minerals and in fine clay for pottery, and to (26 M.) *Temecula*, famous in 'Ramona' and in the essays of Mrs. Helen Hunt Jackson.]

9 M. **Riverside** (875 ft.; **Glenwood Mission Inn*, a building of Spanish-Mission architecture, tastefully furnished and well-managed, from $ 3; *Reynolds*, commercial, from $ 2½), a town of (1900) 7973 inhab., offers, with the region around, a notable instance of the transformation of an uninviting desert into a garden, by virtue of industry and courage. It is the centre of the seedless navel orange culture. The original tree from which these groves have sprung is now within the grounds of the Glenwood Hotel. Over 2,500,000 boxes of oranges (worth $ 2,000,000) are exported annually, each box containing from 80 to 200 oranges. Lemons are also cultivated with success. The town is beautifully laid out, with wide streets bordered by ornamental trees. **Magnolia Avenue* is 10 M. long and 130 ft. wide, with double rows of pepper-trees. No bars or 'saloons' are allowed in the town, and 'Bradstreet' ranks it as the richest community, per caput, in the country. *Sherman Institute*, a famous Indian school, is situated here. The *Albert S. White Park*, within the city limits, contains an unrivalled collection of cacti. The attractive *Public Library* is built in the Mission style, and the *County Court House* is also a tasteful structure. There are many most delightful drives in the neighbourhood, which give the visitor, along with the views of the San Bernardino Range, perfect pictures of every stage of orange-growing. The **Huntington Park Drive*, on *Mt. Rubidoux* (1837 ft.), affords magnificent views of mountain and valley. At the top are a Memorial Cross to Padre Junipero Serra (p. 525) and two old Mission Bells. Riverside is a favourite resort of tourists and health-seekers, the air being, curiously enough, at once stimulating and soothing. — From (24 M.) *Corona*, once known as *South Riverside* (600 ft.), we follow the windings of the *Santa Ana River* through its wild and lovely canyon to (47 M.) *Orange*, where we join the line from Los Angeles to San Diego (p. 533).

Beyond San Bernardino our line continues towards the W. Between (1759 M.) *Etiwanda* and (1763 M.) *North Cucamonga* stretch immense vineyards, and good wine is made at the latter place. 1767 M. *Upland* (1210 ft.), formerly *North Ontario*, is a great shipping point for the citrus-growing district of which it is the centre. An electric tramway runs to (2½ M.) *Ontario* (p. 550) through **Euclid Avenue*, which is planted with eucalyptus and pepper trees. The ascent of *Mt. San Antonio* ('Old Baldy'; 10,080 ft.) may be made from Upland by driving for 9 M. through *San Antonio Canyon*, and then continuing the ascent on a burro.

From (1772 M.) *North Pomona*, a suburb of *Pomona* (junction with the Southern Pacific Railway, see p. 549), the line runs between vineyards, orange-groves, and olive-groves, broken by desert wastes. 1780 M. *Glendora*, a centre for citrus fruit and berries. 1783 M. *Azusa* (Azusa Hotel, $ 2½) is 1 M. to the S. of *San Gabriel Valley*, with its numerous streams giving good fishing for large mountain trout. 1788 M. *Monrovia* (Grand View Hotel, from $ 2), where our line crosses the Southern Pacific Railway (see p. 550), is also connected with Los Angeles by electric cars. 1792 M. *Santa Anita;* 1794 M. *Lamanda Park* (1738 ft.).

1797 M. *Pasadena*, and thence to —

1807 M. **Los Angeles** *(Santa Fé Station)*, see p. 536.

b. Viâ Rock Island System.

1759 M. Chicago, Rock Island, and El Paso Railroad in 55 hrs. (fares etc. as at pp. 476, 485). Through-trains run daily from Chicago to (2277 M.) Los Angeles.

From *Kansas City* to (67 M.) *Topeka* we follow the lines of the Union Pacific Railway (see p. 470). We then diverge to the left. — 100 M. *McFarland* (1035 ft.), the junction of a branch-line to (105 M.) *Belleville* (p. 470). 148 M. *Herington* (1340 ft.) is the junction of a branch-line to (49 M.) *Salina* (p. 427) and also of one of the main lines of the Rock Island System running S. across Oklahoma (p. 476) to *Fort Worth* and *Dallas* (p. 637). — 196 M. *McPherson* (1510 ft.) is the centre of the great wheat and broom-corn belt of Kansas. — 234 M. *Hutchinson* (1545 ft.), on the *Arkansas River*, with flour-mills and packing-houses. There are large salt-mines in the vicinity. — 256 M. *Turon* (1785 ft.); 276 M. *Pratt* (1920 ft.), with the Kansas State Fish Hatchery; 307 M. *Greensburg* (2245 ft.); 326 M. *Bucklin* (2430 ft.), the junction of a branch-line to (27 M.) *Dodge City* (p. 477); 370 M. *Meade* (2515 ft.). — At (413 M.) *Liberal* (2855 ft.) we enter the N.W. corner of Oklahoma (p. 476); 433 M. *Hooker* (3000 ft.); 473 M. *Texhoma* (3500 ft.), named from its situation on the frontier between Texas and Oklahoma. For the next 50 M. we pass through the so-called 'Pan Handle' of Texas. — 524 M. *Dalhart* (3990 ft.); 565 M. *Bravo* (4100 ft.). We now enter *New Mexico* (p. 493). — 569 M. *Naravisa* (4195 ft.); 594 M. *Logan* (3830 ft.). — 617 M. *Tucumcari* (4195 ft.).

We change here from 'Central' to 'Mountain' time (see p. xiv). — *Fort Bascom*, 9 M. to the N.E., on the *Canadian River*, is one of the oldest forts in the W. — A branch-line runs N.W. to (132 M.) *Dawson*, opening up the coal-fields there.

At (676 M.) *Santa Rosa* (4265 ft.), on the *Pecos River*, the Rock Island line joins the El Paso & North-Eastern Railroad. The surrounding country is devoted to stock-raising. — From (745 M.) *Torrance* (6430 ft.) the Santa Fé Central R. R. runs N. to (116 M.) *Santa Fé* (p. 478). — 753 M. *Corona* (6665 ft.), the highest point on the Rock Island El Paso Route. 'The surrounding country is especially adapted to the Angora goat industry, probably the most profitable pursuit in this section of New Mexico.' — 804 M. *Carrizozo* (5440 ft.) the junction of a line to (21 M.) *Capitan*, with its coal-fields. — At (820 M.) *Oscura* (5015 ft.) we come into sight of the Sierra Blanca (to the left). Adjacent is the *Mal Pais* (bad land), a black lava flow of recent formation, 40 M. long and 10 M. wide, which fills an ancient river-bed. — 832 M. *Three Rivers* (4560 ft.) gets its name from three mountain rivers which rise near *White Mountain* (14,000 ft.), the highest elevation in New Mexico. — 849 M. *Tularosa* (4435 ft.; The Sanders, $1\frac{1}{2}$), the 'rose blossom', is the centre of a great fruit-growing section and a popular health-resort. — 862 M. *Alamogordo* (4310 ft.), founded in 1900,

is already a prosperous little city with 4000 inhab. and the general offices and shops of the El Paso North-Eastern R. R.

A branch-line ascends to (33 M.) *Russia*, passing (26 M.) *Cloudcroft* (The Lodge, $ 2½-5), a summer-resort in the Sacramento Mts.

900 M. *Jarilla Junction* (4170 ft.), with a rich turquoise mine owned by Tiffany of New York (p. 47). — 944 M. *Fort Bliss*, in Texas, is a U. S. military post.

949 M. *El Paso* (see p. 591). We here join the S. P. Railway route to (1759 M.) *Los Angeles* (p. 531), described in R. 87.

77. From Denver to Salt Lake City and Ogden.

a. Viâ Denver and Rio Grande Railroad.

753 M. Railway in 22-24 hrs. (fare $ 18; sleeper $ 5; fare to Colorado Springs, $ 2.25). Through-cars run on this line to San Francisco viâ Leadville (see p. 498), but lovers of the picturesque may choose the narrow-gauge route over *Marshall Pass*, uniting with the other line at Grand Junction (comp. pp. 497, 499).

The somewhat ambitious title of *'Scenic Line of the World'*, adopted by this railway, is, perhaps, more justified by facts than is usually the case with such assumptions, for the railway actually passes through some of the grandest scenery in the United States.

Denver, see p. 471. The line runs towards the S., parallel with the Atchison, Topeka, and Santa Fé Ry. (p. 476). To the right flows the *Platte River*, while in the distance are the dim snowy peaks of the *Rocky Mts.* (comp. p. 471). 25 M. *Sedalia* (5835 ft.); 33 M. *Castle Rock* (6220 ft.), so named from a rock that rises from the plain to the left. Pike's Peak (p. 491) may now be seen in front, to the right. — 43 M. *Larkspur* is the station for *Perry Park*, with its fantastic rock formations. To the right, about 8 M. farther on, rises the *Casa Blanca*, a huge white rock 1000 ft. long and 200 ft. high. — 52 M. *Palmer Lake* (7240 ft.; Rockland, $ 2-3; Rail. Restaurant), on the watershed between the *Platte*, flowing N. to the Missouri, and the *Arkansas*, flowing S. to the Mississippi. A road leads to the S.W. from Palmer Lake to (35 M.) *Manitou Park* (p. 498). — The line traverses cattle and sheep ranches. The snowy mountains re-appear from their temporary concealment behind the foot-hills. — 62 M. *Husted* (6595 ft.). Several fantastic rocks are seen to the left. 67 M. *Edgerton* (6420 ft.) is the nearest station to *Monument Park* (p. 492). — As we approach Colorado Springs we have a splendid view, to the right, of Pike's Peak (p. 491) and the Gateway of the Garden of the Gods (p. 490). To the left lies *Monument Creek Park* (p. 489).

75 M. **Colorado Springs.** — *The Antlers Hotel, R. from $ 1½; Alamo, $ 2½-4, R. from $ 1; Plaza, from $ 2½, R. from $ 1; Alta Vista, R. from $ 1; *Broadmoor Hotel, connected with the Casino (p. 490), $ 3-4. — *Tramways* traverse the chief streets and run to various suburban points.

Colorado Springs, a city of (1900) 21,085 inhab., on an elevated plateau (6000 ft.) near the E. base of Pike's Peak, is pleasantly laid

out, with wide tree-shaded streets, and resembles a well-kept and well-to-do New England country-town. It is the principal health-resort of Colorado, and has become the permanent residence of many who are unable to bear the changeable climate of England or the E. coast.

Colorado Springs was founded in 1871, though a settlement had been made somewhat earlier at *Colorado City* ('Old Town'), a small industrial colony (2914 inhab.), 2 M. to the N.W. (comp. p. 498). No manufacturing is carried on at Colorado Springs, which has been carefully kept as a residential and educational centre, and no 'saloons' are permitted. It is the pleasantest headquarters for exploring the surrounding district (Manitou and Pike's Peak included).

The *View of the mountains from Colorado Springs, well seen from Cascade Avenue, near Colorado College, is very grand. *Pike's Peak* (p. 491) dominates the scene, while to the S. of it (named from right to left) rise *Cameron Cone* (10,685 ft.), *Sachett Mt.*, *Bald Mt.* (12,347 ft.), *Mt. Rosa* (11,427 ft.), and *Cheyenne Mt.* (p. 490). To the right of Pike's Peak opens the *Ute Pass* (p. 498), and still farther to the right lies the *Garden of the Gods* (p. 490). The *Cheyenne Canyons* (p. 490) lie between Cheyenne Mt. and Mt. Rosa. In the foreground is the high-lying plateau known as the *Mesa* (Span. 'table-land'). To the E. and S. of the town spreads the illimitable prairie, which in certain states of the atmosphere looks startlingly like the ocean — an illusion intensified by the moving shadows, the smoke of distant locomotives, and the outcrop of lines of rocks resembling breakers.

The Climate of Colorado Springs resembles that of Davos and, like it, is especially good for consumption or as a preventive for those predisposed to that disease. It is also well suited to persons suffering from nervous exhaustion, malarial poisoning, and other debilitating affections, but is usually harmful to the aged and to those with organic affections of the heart or nerves. It has more wind and dust than Davos, but also more sunshine and dryness; and as the ground is bare most of the winter, there is no period of melting snow to prevent the invalid staying all the year round. Riding, driving, and the usual winter-sports can be freely indulged in. There is no rain from Sept. till April. In the winter (Nov.-Mar.) of 1888-89 the average temperature at Davos was 26° Fahr., of Colorado Springs 30°; the latter had 300 hrs. more sunshine than the former. The prevailing winds at Colorado Springs are S.E. and N.; the average percentage of humidity is 47. The town is sheltered by the foot-hills, except to the S. E., where it lies open to the great plains; and, being situated where they meet the mountains, it enjoys an openness and free supply of fresh air like the sea-shore, without its dampness. The soil is dry sand and gravel, with a shallow top-layer of garden soil. There are no springs beneath the town-site. Good water is brought from the mountains, and the sewerage system is excellent. The accommodation for invalids is comfortable. No invalid should come or remain without medical advice.

Colorado Springs is a capital centre for innumerable attractive drives and excursions. Among the most prominent buildings are *Colorado College* (600 students) and its preparatory school, *Cutler Academy;* the *State Asylum for the Deaf, Dumb, and Blind;* the *National Printers' Home*; the *Opera House*; and the *Hotels* and *Hospitals. Helen Hunt Jackson* ('H. H.'; 1831-85) is buried in *Evergreen Cemetery.* Several charming *Parks* have been laid out within the city itself and on the surrounding bluffs, such as that on *Monument Creek*, with its three springs, on the W. side of the city. The chief clubs are the *El Paso Club*, the *Pike's Peak Club*, the *New Elks*, the *Golf Club*, and the *Country Club* (p. 490).

Excursions from Colorado Springs.

(1). **Palmer Park**, formerly *Austin Bluffs*, 3½ M. to the N.E., is joined with the city by two boulevards and commands a magnificent *View of the Rocky Mts., the city, and the plains. The Spanish Peaks, 100 M. to the S., are clearly discernible. To the W. are the peaks mentioned at p. 489. To the N. is the *Divide*, or watershed between Colorado Springs and Denver.

(2). CHEYENNE MT. AND THE CHEYENNE CANYONS. The foot of **Cheyenne Mt.** (9407 ft.), which rises 5 M. to the S.W. of Colorado Springs, is easily reached in 25 min. by electric tramway (10 c.), passing near the pleasant quarters of the *Country Club* (p. 489) and the **Broadmoor Casino*, with its boating-lake, a good restaurant (D. $ 1.25), ball-rooms, and orchestral concerts. The **Cheyenne Mt. Road* leads across the flank of the mountain, commanding exquisite views, in which the brilliant red rocks, the blue sky, the green trees, and the dazzling white snow offer wonderful combinations of colour. The road is well kept, but is steep and narrow, so that steady horses, driver, and head are desirable. It goes on to (22 M.) *Seven Lakes* (10,350 ft.; inn, sometimes closed) and to (30 M.) *Cripple Creek* (p. 491), but many visitors turn back at the (21½ M.) *Horseshoe Curve*. The summit of the mountain may be reached by a path (1 M.) diverging to the left near the saw-mill. — The **Cheyenne Canyons* are on the N. side of the mountain, and the electric tramway ends near their entrance. The **S. Canyon* (adm. 50 c., on Sun. 25 c.) may be followed on foot to (1 M.) the *Falls*, which descend 500 ft. in seven leaps. From the top of the flights of steps we may ascend to the left to the brink of the canyon (*View) and go on thence to the above-mentioned road, where our carriage may be ordered to meet us. The road through the *N. Canyon* (fine falls, pools, and cliffs) has recently been extended to *Bear Creek*, making what is known as the **High Drive* (from Colorado Springs and back, 3½ hrs.). A good view of both canyons is obtained from the Cripple Creek Railway (p. 491).

(3). GARDEN OF THE GODS (5 M.). The road leads to the N.W. across the *Mesa* (p. 489), passing (4 M.) the entrance to *Glen Eyrie*, a private estate (visitors admitted), including a famous horse-raising farm and containing fantastic rocky scenery (Cathedral Rock, Major Domo, etc.). About 1 M. farther on we reach the **Gateway of the Garden of the Gods*, consisting of two enormous masses of bright red rock, 330 ft. high and separated just enough for the roadway to pass between. The *Garden of the Gods is a tract of land about 500 acres in extent, thickly strewn with grotesque rocks and cliffs of red and white sandstone. Among the chief features are the *Cathedral Spires*, the *Balanced Rock*, etc. On reaching the cross-roads on the other side of the Garden we may either proceed to the right to (1½ M.) *Manitou* (see below) or return to the left, viâ *Colorado City* (p. 498), to (4½ M.) Colorado Springs. — Walkers should take the Manitou tramway to *Garden of the Gods Station* (10 c.), and walk through the Garden to the *Gateway* (see above; visit to Glen Eyrie) and the *Balanced Rock*, whence they may return by tramway to Colorado Springs or go on to *Manitou* (see below).

(4). Manitou (6307 ft.; *Cliff Ho.*, $ 3-5; *The Mansions*, $ 3-5; *Iron Springs*, $ 4; *Navaho*, $ 2½-4; *Grand View*, from $ 2½; *Sunnyside*, *Ruxton*, $ 2-3), situated in a small valley among the spurs of Pike's Peak, and at the mouth of the Ute Pass (p. 498), is largely frequented for its fine scenery and its effervescing springs of soda and iron. It is reached from Colorado Springs by the railway (viâ Colorado City, 6 M.; 10 c.), by electric tramway (10 c.), or by driving across the Mesa or through the Garden of the Gods (ca. 5 M.; comp. above). The waters, which belong to the group of weak compound carbonated soda waters and resemble those of Ems, are beneficial in dyspepsia, diseases of the kidneys, and consumption. The chief springs are the *Navajo*, *Manitou*, *Shoshone*, *Little Chief*, and *Iron*. The water is very palatable and is used both for drinking and bathing; there is a well-equipped *Bath House*. The so-called *Cliff Dwellings* are an imitation of such prehistoric houses as those mentioned at p. 493 and contain a few Indian antiquities. Among the numerous pleasant points within reach of Manitou are the picturesque **Ute Pass* (p. 498), with the fine *Rainbow Falls* (1½ M. from Manitou) and the *Grand Caverns* (adm. $ 1; fine stalactites and stalagmites,

0 1 2 3 4 5 Statute Miles 1:316,800 (5 Miles to an Inch) 0 2 4 6 8 Kilometres

often gorgeously coloured); *Williams Canyon*, with (1 M.) the *Cave of the Winds* ($ 1; these two walks easily combined by a trail near the entrance of the Cave of the Winds); the (3 M.) *Red Canyon; Ruxton's Glen* and *Engleman's Canyon;* the (3½ M.) *Garden of the Gods* (p. 490); *Monument Park* (p. 492); the *Cheyenne Canyons* (p. 490; 8 M.); and the *Seven Lakes* (p. 490; 9 M. by trail, 25 M. by road). *Manitou Park* (p. 498) is 20 M. distant.

(5). *Pike's Peak (14,108 ft.), one of the best-known summits of the Rocky Mts., rears its snowy crest about 6 M. to the W. of Colorado Springs and just above Manitou. It is usually ascended by the Manitou and Pike's Peak Railway, which was built upon the Abt cog-wheel system and opened in 1891 The railway begins in Engleman's Canyon, a little above Manitou Iron Springs (p. 498). Its length is 8¾ M., with a total ascent of 7500 ft. or an average of 846 ft. per mile (steepest gradient 1 : 4). The ascent (return-fare $ 5) is made in about 1½ hr. About one-third of the way up is the *Halfway House* (meal 75 c.), a pleasant little hotel in *Ruxton Park*, frequented by summer-visitors. — The Bridle Path (6 hrs. on foot or on horseback; horse $ 5) begins near the railway-station and ascends through *Engleman's Canyon* (trail well defined; guide unnecessary for experts). Another trail, 4½ M. long, now seldom used, ascends from the *Seven Lakes* (p. 490). — The old carriage-road up Pike's Peak, beginning at *Cascade*, 6 M. from Manitou, is now disused. — The summit is occupied by a small *Inn*, open in summer (meals $ 1), containing a large telescope. A tablet (1906) commemorates the discovery of Pike's Peak by Lieut. Zebulon Pike in 1806. The *View is superb, embracing thousands of square miles of mountain and plain. The Spanish Peaks (p. 492) and the grand Sangre de Cristo Range (including Blanca Peak, p. 492) are seen to the S. and Long's Peak to the N., while the other peaks visible include Mt. Lincoln (N.), Gray's Peak, Mt. Bross, and the neighbouring mountains named at p. 489. Denver, Pueblo, Colorado Springs, and Manitou are all visible. The ascent of Pike's Peak can be safely made in summer only, owing to the snow; the mountain-railway begins running in June.

(6). From Colorado Springs to Cripple Creek, 59 M., *Colorado Springs & Cripple Creek District Railway* in 3 hrs. (fare $ 2.75; return-fare, good for ten days, $ 5, on Sun. and almost daily from June to Oct., $ 2.50, or for passengers by the transcontinental trains, $ 2.75; through-carriages and observation-car from Denver). This railway, popularly known as 'The Short Line', connects Colorado Springs with the rich Cripple Creek Gold District, and affords a trip of singular attractiveness in its views of scenery, its glimpses of gold-mining, and the engineering achievement of its construction. It winds round the rim of the canyons, curving in quick loops and sudden returns almost on itself, and passing through nine tunnels. — Leaving Colorado Springs, the train reaches the margin of *North Cheyenne Canyon* (p. 490) at (7 M.) *Point Sublime* (7159 ft.), affording fine views of the canyon, Colorado Springs, and *Crescent Lake*. On the right, far above us, are the *Silver Cascade Falls*. Beyond (11 M.) *Fairview* (7926 ft.) we reach the junction of the N. Canyon with the *South Cheyenne Canyon*, along the edge of which we now mount, passing (15 M.) *St. Peter's* and (18 M.) *Duffields*, to (21 M.) *Summit* (9918 ft.), where the view is singularly impressive. Along the line we have seen many favourite camping-grounds by the side of pretty mountain-streams, which give abundant trout-fishing. At (30 M.) *Clyde* (3½ M. from *Seven Lakes*, p. 490) is *Cathedral Park*, with fantastic rock-formations and a cavern of perpetual ice. At (40 M.) *Cameron* (the junction of the Midland Terminal Railway to *Divide*, p. 498) we cross the lower of two passes into (45 M.) *Victor* (see below). [Trains occasionally run direct to (46 M.) Cripple Creek by the *Hoosier Pass* (10,30 0 ft.).] Both passes afford views of the W. slope of Pike's Peak (see above) and the Sangre de Cristo Range (p. 495). — 5¼ M. *Cripple Creek* (see below).

Cripple Creek (9590 ft.; *National Hotel*, R. from $ 1) has changed since 1891 from a small cattle-ranch into one of the chief gold-mining towns in the country, with (1900) 10,147 inhab. and numerous substantial buildings. The annual value of its gold-production is now about $ 20,000,000. It is connected by electric tramway with *Victor* (The Baltimore, $ 2½), another important mining-centre, with 4986 inhab.; and a circle-tour by the

'High Line' and the 'Low Line' (fare 25 c.) gives an excellent survey of the various gold-camps of the district.

(7). **Monument Park** (*Monument Hotel*), a tract of curiously eroded sandstone rocks, similar to those of the Garden of the Gods (see p. 490), may be reached from Colorado Springs by road (9 M.; carr. $ 6-8) or by railway to *Edgerton* (p. 483), from which it is 1/2 M. distant.

Among other points of interest near Colorado Springs are *Bear Creek Canyon*, 3 M. to the W.; *My Garden* (so named by H. H.), 4 M. to the S.W., on the slope of Cheyenne Mt. (view); *Templeton's Gap* and *Colorado Springs Garden Ranch*, 4 1/2 M. to the N.E.; and *Blair Athol*, a lovely glen to the N. of Glen Eyrie (p. 490).

Beyond Colorado Springs our line continues to run towards the S. To the right we see *Cheyenne Mt.* (p. 490); to the left extends the boundless prairie. Stations unimportant.

119 M. **Pueblo** (4665 ft.; *Union Depot Hotel & Restaurant*, $ 3, meal 75 c.; *Grand*, from $ 3; *Maine*, $ 3-4; *Southern*, $ 2), situated at the confluence of the *Arkansas River* and the *Fontaine qui Bouille Creek*, is an active commercial and industrial city of 28,157 inhab., with smelting and steel works. It is an important railway-centre and the outlet of a rich mining district (coal, iron, etc.) and also trades in agricultural products. The *Mineral Palace*, a curious building with a ceiling formed of 28 domes, contains specimens of all the minerals produced in the State.

Beyond Pueblo the D. & R. G. R. R. runs due S. on to (210 M. from Denver) *Trinidad* (p. 477), where it joins the main line of the Atchison, Topeka, and Santa Fé Railway (see R. 75 b).

Cuchara Junction (5930 ft.), 170 M. from Denver, is the point of divergence of the Silverton branch of the D. & R. G. R. R., forming part of the 'Around the Circle' tour mentioned at p. 475. Between Cuchara and (191 M.) *La Veta* (7025 ft.) the isolated Spanish Peaks (13,620 ft. and 12,720 ft.) are well seen to the left (S.). Beyond (195 M.) *Francisco* we begin to ascend the *Veta Pass, the summit of which (207 M.) is 9390 ft. above the sea. Two engines are required to draw the train up the steep incline, and great engineering skill has been shown in overcoming its difficulties (maximum gradient 1 : 10). The most abrupt bend is known as the *Mule-Shoe Curve*. To the right rises *Veta Mt.* (11,175 ft.). We now begin to descend into the *San Luis Valley or Park, the largest of the Great Parks of Colorado (p. 461). It is 100 M. long, 60 M. wide, and about 7000 ft. above the sea-level, and is surrounded by mountains 11-14,000 ft. high. 215 M. *Blanca;* 221 M. *Mortimer;* 228 M. *Garland* (7924 ft.). To the right towers the triple peaked *Blanca Peak* (14,390 ft.), the southernmost of the Sangre de Cristo Range and loftiest of the Rocky Mts. — 252 M. **Alamosa** (7536 ft.; *Victoria*, $ 3; *Rail. Restaurant*), a brisk little town of 1141 inhab., on the *Rio Grande del Norte*, is the junction of a branch-line to (69 M.) *Creede* and of another to *Villa Grove* and *Salida* (see p. 495). [The Creede branch ascends along the Rio Grande del Norte. 17 M. *Monte Vista* (7650 ft.; Grand, $ 2-3); 31 M. *Del Norte* (7880 ft.; Windsor Ho., $ 2); 47 M. *South Fork*. Farther on (60 M.) we pass through the *Wagon Wheel Gap* (8450 ft.), a picturesque mountain pass, with *Hot Springs* (Hotel, $ 2 1/2). 69 M. **Creede** (*Zang* $ 2) was one of the most wonderful of the silver cities of Colorado, dating only from the discovery of the ore here in 1891, but already containing 7000 inhab. and producing silver to the value of $ 4,000,000 in 1892. Its 'boom', however, soon gave out, and in 1900 its population had sunk to 938.] — 266 M. *La Jara* ('La Hahra'; 7600 ft.); 272 M. *Manassa*, a Mormon settlement. — 280 M. *Antonito* (7876 ft.; Palace, $ 2) is the junction of a line running S. to (92 M.) *Española* and (125 M.) *Santa Fé*.

[The Española branch enters *New Mexico* (p. 493) at (12 M.) *Palmilla* and traverses a district inhabited mainly by Spanish-speaking Mexicans.

From (65 M.) *Barranca* a stage runs to (11 M.) the hot springs of *Ojo Caliente*. About 6 M. farther on the train enters the wild *Comanche Canyon ('Comanchay'). — 45 M. *Servilleta* is the starting-point for a visit to the (30 M.) *Pueblo de Taos* ('Tows'), one of the most interesting and complete of the cities of the Pueblo Indians (see p. lxii). A grand festival is held here on Sept. 30th. The curious mysteries celebrated by Los Hermanos Penitentes in Passion Week include much self-flagellation and culminate at Easter in a realistic drama of the Crucifixion. — At (73 M.) *Embudo* (5810 ft.), we reach the Rio Grande del Norte (p. 492). — 92 M. *Española* (5578 ft.), a small hamlet. On the opposite bank of the Rio Grande is the old Mexican town of *Santa Cruz*, with a 16th cent. church. Excursions may also be made to the (1½ M.) *Pueblo of Santa Clara*, the (4 M.) *Pueblo of San Juan*, the *Pueblo de Taos* (see above), etc. — Beyond Española the line goes on to (125 M.) *Santa Fé* (p. 478).]

From Antonito the Silverton line runs towards the W., gradually ascending from the San Luis Valley towards the *Conejos Mts.* ('Conehos'). We repeatedly cross and recross the boundary between Colorado and *New Mexico* ('Sunshine State'). Beyond (306 M.) *Sublette* the railway bends round *Phantom Curve*, so called from the spectral sandstone rocks bordering the track. Below us (left) lies the *Los Piños Valley*. The alignment of the railway here is of the most tortuous character. Beyond (310 M.) *Toltec* we thread a tunnel and enter (315 M.) the imposing *Toltec Gorge, the bottom of which lies 1500 ft. below us. The best view is obtained from the bridge crossed soon after emerging from the tunnel; and just beyond this, to the left, is a *Memorial of President Garfield* (d. 1881). At (331 M.) *Cumbres* (10,003 ft.) we reach the top of the pass across the *Conejos* or *San Juan Mts.* and begin the descent. 344 M. *Chama* (7860 ft.: Rail. Restaurant, meal 75 c.). From (390 M.) *Pagosa Junction* a branch-line runs to (31 M.) *Pagosa Springs* (7095 ft.; hotel; springs, 140° Fahr.). 404 M. *Arboles* (6001 ft.). At (426 M.) *Ignacio* we reach a reservation of the Ute Indians. — 452 M. Durango (6508 ft.; *Strater House*, from $ 2½; *Palace*, *Inter-Ocean*, $ 2), a progressive town of 3317 inhab., on the *Rio de las Animas*, is the commercial centre of S.W. Colorado.

[From Durango the tourist may, if he prefer, continue the 'Circle by the *Rio Grande Southern R. R.*, rejoining the main route at *Ridgway* (p. 494). This line passes *Fort Lewis*, crosses the Animas watershed at (21 M.) *Cima* (8588 ft.), and descends the *Mancos Valley* to (40 M.) *Mancos*. This is the starting-point of the trail to the (20 M.) famous *Cliff Dwellings of the Mancos Canyon, which rank among the most important remains of the mysterious cliff-dwellers and should be visited by every student of the native races of America (guide and horses on application to the railroad agent at Mancos). The *Mesa Verde National Park* has been established to ensure their preservation. The so-called 'Cliff Palace' is the largest and best-preserved. Comp. p. lxiii and 'The Land of the Cliff Dwellers', by *F. H. Chapin*. — At (47 M.) *Milwood* (7640 ft.) we cross the *Chicken Creek Divide* and then descend through *Lost Canyon* to (60 M.) *Dolores* (6945 ft.; hotel). [Dolores is the nearest railway-station to the wonderful *Natural Bridges of Utah, which lie about 100 M. to the W. and were discovered in 1 95. The bridges, three in number, may be visited on horseback from the small town of *Bluff*, on the *San Juan River*, 65 M. to the S.E. The *Augusta Bridge* is 265 ft. high and 320 ft. in span; the *Caroline Bridge*, 182 ft. by 350 ft.; and the *Edwin Bridge*, the most graceful, 111 ft. by 205 ft. All three are of light sandstone. The district has been declared a National Park.] From Dolores we ascend through the *Dolores Valley* and the narrow *Dolores Canyon* to (96 M.) Rico (8725 ft.; *Enterprise Hotel*, $ 2½), a mining centre (pop. 811) amid the *San Miguel Mts.* From Rico the train climbs (gradient 11 : 100) to (110 M.) the Lizard Head Pass (10,238 ft.), whence it descends on the other side of the San Miguel Mts., passing (113 M.) *Trout Lake* (9790 ft.; hotel). This descent, by means of the (117 M.) *Ophir Loop* (9220 ft.) and numerous zigzags, iron bridges, and rock-cuttings, taxed the skill of the engineer to the utmost. From (124 M.) *Vance Junction* (8104 ft.) a line runs to (8 M.) Telluride (8104 ft.; *Sheridan*, $ 3), a beautifully situated mining town (pop. 2446), passing the large *Keystone Placer Mine*. From *Telluride* this line goes on to (2 M.) *Pandora*. Beyond (136 M.) *Placerville*

(7309 ft.; hotel) we cross the *Horse-Fly Range*, a spur of the *Uncompahgre Mts.* (p. 496), at the (149 M.) *Dallas Divide* (8977 ft.), and then descend into the fertile **Dallas* or *Pleasant Valley*, surrounded by snow-capped peaks. 154 M. *High Bridge* (7960 ft.). — 162 M. *Ridgway*, see below.

From Durango a branch-line runs to (50 M.) *Farmington*, passing (35 M.) *Aztec*, also with interesting remains of stone pueblos.

Beyond Durango the Silver or 'Rainbow' Route turns to the N. and follows the *Rio de las Animas*. Beyond (459 M.) *Trimble Hot Springs* (6645 ft.; Hermosa, $2½-3) the valley contracts and at (469 M.) *Rockwood* (7355 ft.), with a huge reservoir for supplying water-power to the mines, we reach the beautiful **Animas Canyon*, the walls of which rise 500 ft. above us on the one side and drop 1000 ft. below us on the other. A single mile of track here cost $140,000 (28,000 *l.*) to build. On issuing from the canyon we see the curious *Needle Mts.* towering to the right. We then traverse the pretty little *Elk Park*. To the left rises *Garfield Peak* (12,135 ft.). — 497 M. Silverton (9288 ft.; *Grand*, $3), a mining town with 1360 inhab., and the terminus of this branch of the D. & R. G. R. R., lies in *Baker Park*, near the base of *Sultan Mt.* (13,336 ft.), one of the grandest of the San Juan Mts.

We now follow the *Silverton Railway*, one of the most extraordinary feats of engineering in America, which ascends over *Red Mt.* (13,333 ft.) to (15 M.) *Red Mountain*, a small mining town. The line winds backwards and forwards like the trail of a serpent and finally attains a height of 11,235 ft. (2000 ft. above Silverton). The scenery is of the grandest description, and the *View from the summit is superb. The descent is as wonderful as the ascent. Numerous mines are passed.

At Red Mountain we leave the railway and proceed by stage to (8 M.; a drive of 2½ hrs.) *Ouray* (see below). The road is good and the scenery magnificent. To the left rises *Mt. Abrahams* (12,600 ft.). We pass the *Bear Creek Falls* (250 ft. high) and the **Uncompahgre Canyon*.

Ouray (7720 ft.; **Beaumont Hotel*, $3; *Wilson*, $2½, R. from $1), where we again reach the D. & R. G. R. R., is a picturesque mountain-town with 2196 inhab., frequented for its grand scenery and its hot medicinal springs. To the S. rise *Mt. Hardin* and *Mt. Hayden;* to the N.W. is *Uncompahgre Peak* (p. 496). — The distance from Ouray to *Montrose* (see p. 496) is 36 M. On the way the railway passes the confluence of the *Uncompahgre* and the *Dallas*, (10 M.) *Ridgway* (990 ft.; Mentone, $3-4; see p. 493), the (22 M.) old *Los Piños Agency*, and (26 M.) *Fort Crawford*, a U. S. military post. From Montrose to *Salida* and *Denver* and to *Salt Lake City*, see p. 496.

Our line from Pueblo now diverges to the right (W.) from the line running S. to Trinidad (see p. 492) We follow the course of the *Arkansas River* (left), crossing various tributaries. To the right fine views are enjoyed of Pike's Peak (p. 491), towering above the lower mountains. — 151 M. *Florence*, with large petroleum tanks and derricks.

From Florence to Cripple Creek, 49 M., railway in 3 hrs. (through cars from Denver in 8 hrs.). This line opens up an important mining district. 34 M. *Wilbur;* 44 M. *Victor* (p. 491). — 49 M. *Cripple Creek*, see p. 491

160 M. **Canyon City** (5332 ft.; *Strathmore*, $3; *St. Cloud*, from $2; *Hot Springs Hotel*, 2 M. to the W., $2-3), a small health-resort (3775 inhab.), frequented for its hot mineral springs, situated at the mouth of the Royal Gorge, 2 M. to the W.

The most interesting short excursion is that (electric car) to the new **Suspension Bridge*, crossing the Royal Gorge (see below) 2600 ft. (*i.e.* ½ M.) above the river and the railway. The roadway of the bridge is composed partly of plate glass. About 10 M. off is *Dawson's Camp*, a rich gold mine.

Beyond Canyon City we pass between the Hot Springs Hotel (left) and the *State Penitentiary* (right) and enter the famous ***Grand Canyon of the Arkansas**, 8 M. of stupendous rocky scenery (granite), through which the railway barely makes its way along the boiling

river (observation-car attached to the train here). At the narrowest point, known as the *Royal Gorge*, where the train stops for a few minutes, the rocks tower to a height of 2600 ft. and the railway passes over a bridge hung from girders mortised into the smooth sides of the canyon. Overhead is the suspension bridge mentioned at p. 494. Beyond the canyon we still follow the foaming Arkansas, passing numerous fantastic rocks and crags. Farther on we obtain a good view, in front, of the superb snow-clad **Sangre de Cristo Range*. To the left is the *Broadside Range*. As we near Salida the *Collegiate Peaks* (see p. 474) come into sight, in front (N.W.).

215 M. **Salida** (7038 ft.; *Monte Cristo*, at the station, $3), a small town (3722 inhab.), beautifully situated and commanding a grand mountain-view (to the S., the lower N. peaks of the Sangre de Cristo Range; to the S.W., Mts. Ouray and Shavano; to the N.W., the Collegiate Peaks). The small hill in front of the station (1/2 hr.; very steep path) is a commanding point of view.

From Salida passengers by the Denver & Rio Grande R. R. have a choice of two routes, uniting at *Grand Junction* (p. 497). The narrow-gauge line (left) crosses *Marshall Pass* (p. 496), while the standard-gauge line, with through-carriages (comp. p. 488), runs viâ *Leadville* (p. 498). The latter route, which coincides to some extent with the Colorado Midland Railway (p. 498), is here given in small type, while the Marshall Pass line is given as the main route.

From Salida to Grand Junction viâ Leadville, 235 M., railway in 9-10 hrs. — The train runs towards the N., with *Mt. Shavano* (14,239 ft.) to the left. 7 M. *Brown's Canyon;* 18 M. *Nathrop* (7686 ft.); 25 M. *Buena Vista* (p. 474). To the left tower the *Collegiate Peaks* (p. 474). 42 M. *Granite* (8930 ft.; comp. p. 475) is the best point for excursions to the *Twin Lakes*, one of the finest points in South Park (p. 475). — 56 M. *Malta* (9580 ft.) is the junction of the branch-line to (5 M.) Leadville (p. 498). — 59 M. *Leadville Junction.* At (66 M.) *Tennessee Pass* (10,229 ft.) we cross the Continental watershed (tunnel) and begin to descend towards the Pacific Ocean. To the left rises *Mt. Massive* (14,424 ft.), at the foot of which is *Evergreen Lake.* Just before reaching (74 M.) *Pando* we have a good view (left) of the *Mountain of the Holy Cross* (p. 474). A little farther on we pass through the short but fine *Red Cliff Canyon.* 79 M. *Red Cliff* (8598 ft.). About 5 M. farther on is the *Eagle River Canyon*, where the mining-shafts and miners' dwellings are seen clinging to the sides of the cliffs, 2000 ft. above our heads. Near (87 M.) *Minturn*, to the right, is a rock known as the *Lioness.* From (104 M.) *Wolcott* stages run to (70 M.) *Steamboat Springs*, with a large group of mineral springs. Beyond (133 M.) *Dotsero*, at the confluence of the *Eagle* and *Grand Rivers*, we enter the fine **Canyon of the Grand River*, which is 16 M. long and has rocky sides reaching a height of 2000-2500 ft. We pass through three tunnels, the last 444 yds. long. — 145 M. Glenwood Springs (5747 ft.), see p. 499. A branch-line runs hence to (41 M.) *Aspen* (see p. 499). To the S.E. towers *Mt. Sopris* (12,823 ft.). Beyond Glenwood we continue to follow the Grand River, which flows to the left. 158 M. *Newcastle*, and thence to (235 M.) Grand Junction, see p. 499.

Beyond Salida the narrow-gauge line runs at first towards the S.W. — 220 M. *Poncha* (7471 ft.; Poncha Hot Springs Ho., Jackson Ho., $2), with hot springs (90-185°). is the junction of a branch-line to (11 M.) *Monarch.* — From (226 M.) *Mears Junction* (8421 ft.) a line runs S. to (74 M.) *Alamosa* (p. 492).

This line also runs through a picturesque district, affording good views (left) of the Sangre de Cristo Range, including the *Three Tetons* (p. 456), *Music Peak* (13,300 ft.), and *Blanca Peak* (p. 492).

We ascend rapidly, the boldly constructed line winding backwards and forwards in a series of the most abrupt curves. Lofty mountains rise on every side. The top of the ***Marshall Pass**, one of the loftiest passes across the main ridge of the Rocky Mts., is 10,858 ft. above the sea. The view includes *Mt. Ouray* (13,955 ft.), rising close to the line on the right, and the *Sangre de Cristo Range* to the S.E. Snow lies here all the year round.

The first part of the descent is very rapid, and numerous abrupt curves are turned (no standing on the platform allowed). — 257 M. *Sargent* (8467 ft.). We now traverse a bleak moorland district. Beyond (277 M.) *Parlin* (7942 ft.) we repeatedly cross the meandering *Tomichi*. — 289 M. **Gunnison** (7673 ft.; *La Veta Hotel*, with railway-restaurant, $3, meal 75 c.), a town of 1200 inhab., is of considerable importance as the outlet of a rich mining district.

A branch-line runs from Gunnison to (39 M.) *Ruby*, passing (28 M.) **Crested Butte** (8867 ft.; *Elk Mountain Ho.*, $2), a small town, in a district rich in coal, silver, and gold. The *Crested Butte* is close to the town. The **Elk Mts.** rise finely from the plain to the W. and afford good shooting.

Beyond Gunnison we follow the *Gunnison River*, at first on one side and then on the other. — 314 M. *Sapinero* (7245 ft.) is the junction of a line, running through ***Lake Fork Canyon**, to (37 M.) *Lake City*, near the beautiful *Lake San Cristobal*. An observation car is attached to the train for the passage of the ***Black Canyon**, or *Grand Gorge of the Gunnison*, which is 15 M. long and in some respects even grander than the Royal Gorge. Among the most prominent individual features are the *Chippeta Falls* (right) and the ***Currecanti Needle**, a lofty pinnacle of rock surmounted by a flag-staff (about halfway down the canyon). The river, which we cross and recross, alternates between foaming rapids and pleasant quiet reaches. Near the end of the canyon we diverge to the left from the Gunnison and follow the canyon of its tributary, the ***Cimarron**, one of the finest pieces of the whole gorge. From (329 M.) *Cimarron* (6896 ft.; Rail. Restaurant) we ascend rapidly to (335 M.) *Cerro Summit* (7958 ft.), and then descend, nearly as rapidly, towards the Lower Gunnison. About 2 M. from (341 M.) *Cedar Creek* (6742 ft.) is one end of the *Gunnison Tunnel* (nearly 6 M. long), driven through the Mesa Verde Ridge to divert the water of the Gunnison into the Uncompahgre Valley. 352 M. *Montrose* (5800 ft.; Belvidere, $2½, with rail. restaurant) is the junction of the line to Ouray (see p. 494). The *Uncompahgre Mts.*, culminating in *Uncompahgre Peak* (14,290 ft.), are seen to the S.W. (left). Beyond (373 M.) *Delta* (4970 ft.), the junction of a branch-line to *Paonia* and (44 M.) *Somerset*, in a fruit-growing district, we pass through the *Canyon of the Lower Gunnison*, where the smooth-faced sandstone cliffs are striking. Beyond (398 M.) *Bridgeport* we thread a tunnel 722 yds. long. Farther on we cross the *Grand River*, just above the mouth of the Gunnison.

424 M. **Grand Junction** (4573 ft.; *St. Regis*, $2½-3; *La Court*, R. from $1; *Rail. Restaurant*) is of importance as the junction of the Denver and Colorado Midland railways (see p. 499). We continue to follow the Grand River (left). To the right are the fantastic *Little Book Cliffs*. At (458 M.) *Utah Line* we enter *Utah* (pp. 461, 500). To the left, in the distance, are the *La Sal* and *San Rafael Mts.* To the right are the *Roan* or *Book Mts.* (7000-9000 ft.), with their variegated cliffs. 479 M. *Cisco.* — At (529 M.) *Green River* (4084 ft.) we cross the river of that name and enter another stretch of desert.

Beyond Green River the train ascends steadily towards the Wahsatch Range. At (555 M.) *Lower Crossing* (4630 ft.) we cross the S. fork of the *Price River*. 594 M. *Price* (5547 ft.); 604 M. *Helper* (Rail. Restaurant). At (611 M.) *Castle Gate* (6120 ft.) we reach the ***Castle** or **Price River Canyon**, the entrance to which is formed by two pinnacles of sandstone, 450-500 ft. high, barely leaving room for the railway and river to pass between them. 619 M. *Colton* (7071 ft.). At (626 M.) *Soldier Summit* (7454 ft.) we reach the top of the pass over the **Wahsatch Mts.** and begin to descend on the other side. 633 M. *Clear Creek* (8180 ft.). — 651 M. *Thistle* (5050 ft.) is the junction of a line to *Manti* (with a large Mormon Temple like that at Salt Lake City), *Salina*, and (132 M.) *Marysvale*. A little farther on we pass through the pretty little *Spanish Fork Canyon* and emerge in the beautiful *Utah Valley* (p. 500). To the S. rises *Mt. Nebo* (11,887 ft.). From (666 M.) *Springville* (4555 ft.) a branch-line, with a wonderful double-circle loop, runs through the *Goshen Valley* to (43 M.) *Silver City*, in the *Tintic Mining District* (p. 503). To the left lies *Utah Lake*, with the *Oquirrh Mts.* rising beyond it. — 671 M. *Provo* (4512 ft.; Roberts Ho., $2-3), a thriving little Mormon city, with 6185 inhab., situated on the *Provo River*, a little above its mouth in Utah Lake. A branch-line runs hence through the *Provo Canyon* (waterfalls) to (26 M.) *Heber* (Hot Pots Hotel), with its so-called 'Hot Pots' or natural craters of boiling water. — 688 M. *Lehi* (4550 ft.; comp. p. 503). Farther on we see (left) the small river *Jordan*, connecting Utah Lake with the Great Salt Lake (p. 502). — 706 M. *Bingham Junction* (4365 ft.).

In *Bingham Canyon* are several important copper-mines, often visited from Salt Lake City and producing from 1000 to 6000 tons of ore per day.

As we approach Salt Lake City we have a view to the right of the Tabernacle and Temple.

716 M. **Salt Lake City** (4390 ft.), see p. 499.

Beyond Salt Lake City the train runs to the N., with Great Salt Lake generally in sight to the left. To the right rise the Wahsatch Mts. In the lake are the large and mountainous *Antelope Island* and (farther on) *Fremont Island*. 724 M. *Wood's Cross;* 735 M. *Kaysville*; 735 M. *Layton*; 746 M. *Roy*.

753 M. **Ogden** (4300 ft.), see p. 461.

b. Viâ Colorado Midland Railway.

705 M. Railway in 26-28 hrs. (fare $ 18; sleeper $ 5). Through-carriages to San Francisco. This line ('Pike's Peak Route') also traverses much fine scenery.

From *Denver* to (74 M.) *Colorado Springs* the train uses the tracks of the Atchison, Topeka, and Santa Fé Railway (see p. 476), practically coinciding with that above described. From Colorado Springs the line runs towards the W. 78 M. *Colorado City*, see p. 489; 81 M. *Manitou*, see p. 490. 82 M. *Manitou Iron Springs* (6538 ft.), the starting-point of the Pike's Peak Railway (p. 491). Beyond Manitou the train ascends through the beautiful ***Ute Pass**, on the shoulder of Pike's Peak (p. 491), so called because formerly the regular route of the Ute Indians in passing across the mountains to the plains. 86 M. *Cascade Canyon* (7406 ft.; Ramona, $ 3; Rail. Restaurant), the station for *Cascade* (comp. p. 491); 87 M. *Ute Park* (7558 ft.; Ute Hotel); 90 M. *Green Mountain Falls* (7728 ft.; Hotel, $ 2-3); 95 M. *Woodland Park* (8485 ft.; hotel), at the head of the Ute Pass (splendid view of Pike's Peak). From (100 M.) *Manitou Park Station* (8465 ft.) a four-horse coach runs to (7 M.) **Manitou Park* (7500 ft.). On leaving the Ute Pass we cross the (102 M.) *Hayden Divide* (9180 ft.), part of the Continental watershed.

From Divide the *Midland Terminal Railway* runs towards the S. to (30 M.) Cripple Creek (p. 491; 1½ hr.; through-cars from Denver in 6-7 hrs.), passing (14 M.) *Gillett*, (25 M.) *Victor* (p. 491), and (28 M.) *Anaconda*, all important mining points.

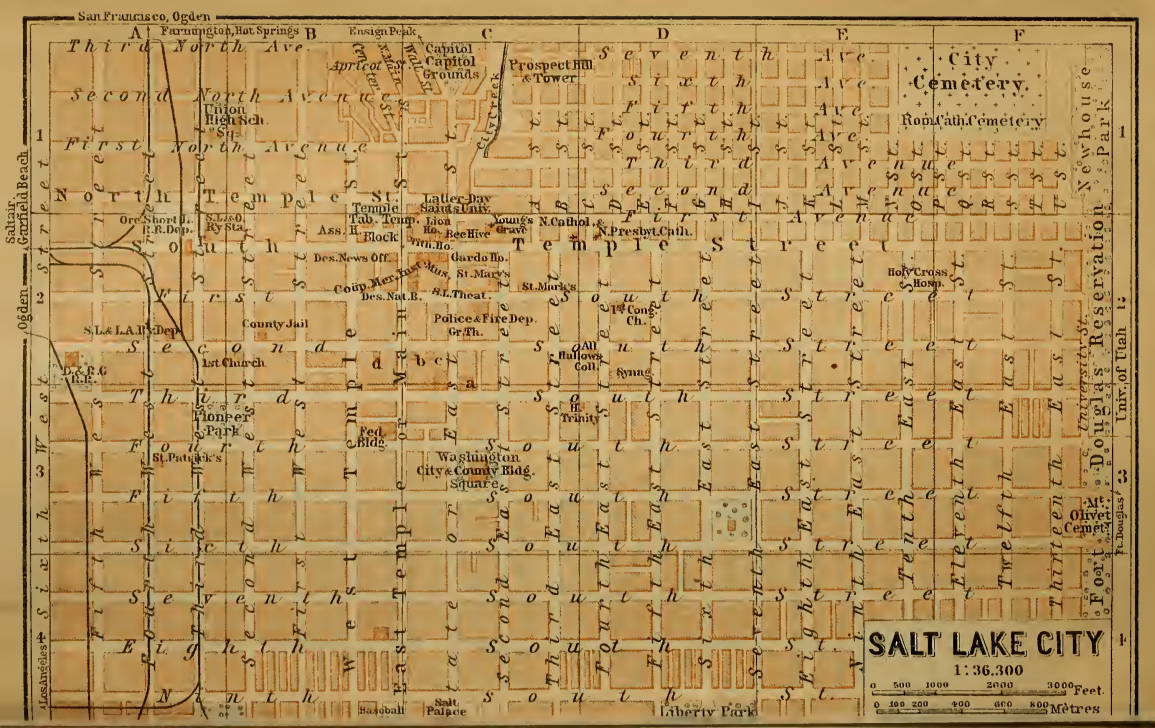
From Divide we descend, passing (111 M.) *Florissant* (8180 ft.), to the fine **Granite* or *Eleven Mile Canyon*, through which rushes the *South Platte River*. We are now traversing *South Park* (p. 475). 123 M. *Howbert* (8520 ft.); 133 M. *Spinney* (8640 ft.); 144 M. *Hartsel Hot Springs* (8890 ft.; Hotel, $ 2-2½), one of the chief resorts in South Park. After crossing the *Trout Creek Pass* (9345 ft.) we descend to (176 M.) *Buena Vista* (p. 474), in the valley of the *Arkansas*. 194 M. *Granite* (8930 ft.); 201 M. *Snowden* (9390 ft.).

213 M. **Leadville** (10,100 ft.; **Vendome*, $ 3-4; *Delaware*, R. from $ 1; *Rail. Restaurant*), one of the highest cities and most celebrated mining centres in the world, is finely situated amid towering mountains. Pop. (1900) 12,455. It is especially interesting in all points connected with mines and miners.

Leadville was founded in 1859 under the name of *California Gulch* and was for several years one of the richest gold-washing camps in Colorado. In 1876 the great carbonate beds of silver were discovered, and the population rose for a time to 30,000. The annual yield of silver in the Leadville mines amounts to $ 15,000,000, and its gold-mining has also again become profitable. The total yield of its mines has been over $ 350,000,000.

Among the favourite excursions from Leadville are those to the *Soda Springs* on *Mt. Massive* (p. 495), 5 M. to the W. (reached by a fine boulevard), and to the *Twin Lakes* (p. 475), 14 M. to the S. — From Leadville to *Denver*, etc., by the Denver & Rio Grande R. R., see R. 77a.

Beyond Leadville the train ascends rapidly towards the ridge of the *Saguache Mts.*, passing the 'Continental Divide' by the (226 M.)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San Francisco, Ogden
Farmington, Hot Springs
Ensign Peak
Capitol
Capitol Grounds
Prospect Hill & Tower
City Cemetery
Rom. Cath. Cemetery
Newhouse Park
Douglas Reservation
Univ. of Utah
Mt. Olivet Cemet.
Fort Douglas
Third North Ave.
Second North Avenue
First North Avenue
North Temple St.
South Temple Street
First South
Second South
Third South
Fourth South
Fifth South
Sixth South
Seventh South
Eighth South
Ninth South
Seventh Ave.
Sixth Ave.
Fifth Ave.
Fourth Ave.
Third Avenue
Second Avenue
First Avenue
West Temple
East Temple or State
Main St.
Union High Sch.
Latter-Day Saints Univ.
Temple
Tab. Temp.
Ass. H.
Block
Lion Ho.
Bee Hive
Young's Grave
N. Cathol.
N. Presbyt. Cath.
Ore. Short L. R.R. Dep.
S.L.&O. Ry Sta.
Des. News Off.
Gardo Ho.
St. Mary's
St. Mark's
Coop. Mer. Inst.
Mus.
Des. Nat. B.
S.L. Theat.
Holy Cross Hosp.
County Jail
Police & Fire Dep.
Gr. Th.
1st Cong. Ch.
All Hallows Coll.
Synag.
S.L.&L.A.Ry. Dep.
1st Church
D.&R.G. R.R.
Pioneer Park
Fed. Bldg.
H. Trinity
St. Patrick's
Washington City & County Bldg.
Square
Baseball
Salt Palace
Liberty Park
Saltair
Garfield Beach
Ogden
Los Angeles

Busk Tunnel (10,790 ft.) below the *Hagerman Pass* (11,530 ft.). It then descends rapidly, past **Hell Gate.* — From (265 M.) *Basalt* (6595 ft.; Rail. Restaurant) a branch-line runs to (18 M.) *Aspen* (comp. p. 495).

Aspen (7950 ft.; *Jerome*, R. from $ 1), finely situated in the heart of the Rockies, is a mining town with 3300 inhabitants. Silver and lead are the chief sources of its wealth, but gold is also found in the vicinity.

We continue to descend along the *Roaring Fork.* — 289 M. **Glenwood Springs** (5760 ft.; **Colorado*, with well-kept grounds, $ 4-5; *Hotel Glenwood*, $ 2½-3½; *Kendrick's Cottages*, R. 75 c.), at the junction of the Roaring Fork and the *Grand River*, has come into prominence on account of its beautiful situation and hot salt mineral springs. The springs, rising on both sides of the Grand River, have a temperature of 120-140° Fahr., are highly mineralized, and are beneficial in rheumatism, gout, and most diseases of the blood and skin. The excellent bathing arrangements include a swimming basin, 640 ft. long and 110 ft. wide (temp. 95°). A natural Turkish bath may be enjoyed in one of the *Vapour Caves* (105-110°). From Glenwood a branch-line leads to (41 M.) *Aspen* (see above).

301 M. *Newcastle;* 315 M. *Rifle* (5550 ft.); 332 M. *Grand Valley;* 345 M. *De Beque.* At (376 M.) **Grand Junction** (p. 497) we pass on to the lines of the *Rio Grande Western Railway;* and the journey hence to (670 M.) **Salt Lake City** and (705 M.) **Ogden** is the same as that described in R. 77a.

Salt Lake City. — **Railway Stations.** *Denver & Rio Grande* (Pl. A, 2), cor. of Second South and Fifth West Sts.; *Oregon Short Line* (Pl. A, 2), South Temple St., also used by the San Pedro, Los Angeles, & Salt Lake R. R. (see R. 78); *Salt Lake & Ogden* (Pl. A, B, 2), Third West St.

Hotels. *Knutsford (Pl. a; C, 2, 3), cor. of Third South and State Sts., from $ 4, R. from $ 1½; Kenyon (Pl. b; C, 2), cor. Main and Second South Sts., from $ 2½, R. from $ 1; New Wilson (Pl. c; C, 2), Second South St., R. from $ 1; Cullen (Pl. d; B, 2), Second South St., R. from $ 1; Grand Pacific (Pl. f; A, 2), cor. S. Temple and Third West Sts.

Tramways (electric) traverse the principal streets (frae 5 c.). — The 'Seeing Salt Lake City' **Observation Cars** (comp. p. 19) afford a complete and speedy tour of the town (2 hrs.). They start twice daily (10 a.m. and 1.30 p.m.; fare 50 c.) from the corner of Second South and Main Streets, stopping at the chief hotels to pick up passengers.

Theatres. *Salt Lake Theatre* (Pl. C, 2), cor. of State and First South Sts.; *Grand Theatre* (Pl. C, 2), Second South St.; *Salt Palace* (Pl. C, 4), used for dramatic, musical, and other performances.

Post Office in the Federal Building (Pl. B, 3).

Streets. Salt Lake City is laid out on a rectangular plan, and its streets are named and numbered in such a way that it is easy to find any given point. The centre of the city is Temple Square or Block (Pl. B, 1, 2), the streets enclosing which are named *North Temple*, *West Temple*, *South Temple*, and *East Temple Streets.* The streets to the N. of N. Temple St. are known as 1st North, 2nd North, and so on; those to the W. of W. Temple St. as 1st W., 2nd W., etc.; those to the S. of S. Temple St. as 1st S., etc.; those to the E. of E. Temple St. as 1st E., etc. Each block is ⅛ M. long. The E. and W. streets to the N. of Temple Square are now called 'Avennes'. First East St. was recently renamed State St. Popularly,

East Temple St. is known as Main St. and South Temple St. as Brigham St. On the bench in the N.E. part of the city the blocks are smaller, and the streets narrower and named differently.

Salt Lake City (4390 ft.), the headquarters of the *Church of Jesus Christ of Latter Day Saints* or '*Mormons*' and the capital of the state of *Utah*, is admirably situated in a spacious upland valley, encircled by mountains, which approach the city closely on the N. and E. (Wahsatch Range), while they are 20 M. distant to the S. and 18 M. distant to the S.W (Oquirrh Range). *Great Salt Lake* (p. 502) lies 12 M. to the N.W. The city is regularly laid out and the streets are wide and shaded with trees. Each house in the residence-quarters stands in its own garden, the general effect being cool and pleasant. In 1900 the population was 53,531 (now probably 100,000).

Salt Lake City was founded in 1847 by the *Mormons*, under *Brigham Young* (p. 501), who had been driven from Nauvoo (Ill.; see p. 429) the previous year, and had made a long and perilous journey across the Indian-haunted plains. The district was then a barren and unpromising desert, but the industrious Mormons set to work at once to plough and plant and began that system of irrigation which has drawn out the latent capabilities of the soil and made the Utah valleys among the most productive regions in the country. The *Territory of Utah* was organized in 1850, with Brigham Young (d. 1877) as the first governor. A copious stream of Mormon immigrants soon set in from Europe; and, in spite of numerous collisions with the U. S. Government on the question of polygamy, the history of the city and territory has been one of steady progress and development. Of late years the proportion of 'Gentile' (*i.e.* Non-Mormon) inhabitants in Salt Lake City has increased very rapidly and introduced many new features and problems into the situation. Polygamy has been declared illegal by the U. S. Courts and has been discontinued. In 1896 Utah was admitted to statehood.

Salt Lake City has become a very important mining centre, and enormous quantities of gold, silver, copper, zinc, and iron are treated in its smelters. Comp. pp. 497, 503.

† 'Early in 1820, at Manchester (N. Y.), *Joseph Smith*, then fourteen years old, became interested in a religious revival but was puzzled by the conflicting doctrines taught. He asked of God in prayer, which sect was right. In answer he saw a vision of God the father and his son Jesus Christ, and was told that all the sects were wrong. In subsequent visions he learned that he was to be the instrument in restoring the Gospel and the Holy Priesthood of the Son of God to men, and in establishing the Church and Kingdom of God upon the earth, never more to be overthrown; also where he would find the inspired history of the aborigines of America engraved in ancient characters on metal plates. This he afterwards translated into English, by the power of God, and published in 1830, as the Book of Mormon. It has been translated and published in Danish, French, German, Italian, Welsh, Swedish, Spanish, Dutch, Hawaiian, Samoan, and Maori, and translated into Hindostanee, Turkish, and Hebrew. On May 15th, 1829, John the Baptist appeared to Joseph Smith and *Oliver Cowdery*, laid his hands on them, and conferred upon them the Aaronic or Lesser Priesthood. The same year the apostles Peter, James, and John appeared to them and conferred upon them the Apostleship of the Melchisedek or Higher Priesthood.

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† This statement of the origin and doctrines of Mormonism was drawn up for *Baedeker's United States* in the office of the President of the Church of Jesus Christ of Latter-Day Saints.

The original MS. of the Book of Mormon preserved in a vault at the office of the 'Saints Herald'.

'The Church of Jesus Christ of Latter-Day Saints was organized with six members, on April 6th, 1830, at Fayette (N. Y.), by Joseph Smith, by appointment and instruction from God. Twelve apostles, also seventies, high priests, elders, bishops, priests, teachers, and deacons, have been since ordained, now numbering many thousands. They have preached the Gospel to many nations, and hundreds of thousands of believers have been baptized. *Joseph F. Smith*, a nephew of the original founder, is the present president of the Church, with *John R. Winder* and *Anthon H. Lund* as his counsellors, the three constituting the First Presidency.

'Driven from Missouri and Illinois, with their prophet and president, Joseph Smith, and his brother Hyrum murdered in Carthage jail (Ill.) on June 27th, 1844, by an armed mob, the Latter-day Saints were led by *Brigham Young* to Salt Lake in 1847, spreading since into the regions about. They now number over 346,000 and have built six Temples to the Lord, the most imposing of which is at Salt Lake City.

'The Latter-Day Saints believe in God the Father; his son Jesus Christ and his atonement; the Holy Ghost; the Gospel, the first principles being faith, repentance, baptism by immersion for remission of sins, and the laying on of hands for imparting the Holy Ghost; the resurrection of the dead, and the eternal judgment; the necessity of divine authority, by calling and ordination, to preach the Gospel and administer its ordinances; apostles, prophets, seventies, high priests, elders, bishops, priests, teachers, and deacons, for the work of the ministry; revelation from God; the Bible, Book of Mormon, and other inspired books; the gathering of Israel and the building up of Zion and Jerusalem; the sacredness and eternity of marriage; and the personal reign of Christ upon the earth as King of Kings and Lord of Lords.

Temple Block (Pl. B, 1, 2), the Sacred Square of the Mormons, lies near the centre of the city and forms the chief object of interest to strangers. It is 10 acres in area, is surrounded by a high adobé wall, and contains the Tabernacle, the Temple, the Assembly Hall, and the Bureau of Information. Visitors are admitted from 8 to 5.

The *Bureau of Information*, near the S. gate of the grounds, provides guides (gratis) for the Tabernacle and other points of interest.

The ***Tabernacle** (Pl. B, 2), built in 1864-67, is a huge and extraordinary structure, in the shape of an oval or ellipse, 250 ft. long, 150 ft. wide, and 70 ft. high. It is surmounted by a wooden roof with iron shingles, resembling the shell of a turtle or the inverted hull of a ship, supported by 44 sandstone pillars.

The Interior, presenting one of the largest unsupported arches in the world, has seats for over 8000 people and can accommodate about 12,000. Amorphous though it be, there is something imposing in its size and proportions, while it is well adapted for speaking and hearing. The building is surrounded by a gallery, except at the W. end, where there are a platform for speakers, seats for the choir and others, and an immense and fine organ. Public religious services are held in the Tabernacle every Sunday at 2 p.m., and it is also used for lectures, sacred concerts, and other meetings. It is open to visitors daily, 8-5.

A little to the E. of the Tabernacle is the ***Temple** (Pl. B, 2), a large and handsome building of granite, erected in 1853-93, at a cost of over $4,000,000. It is 186 ft. long from E. to W. and 99 ft. wide. At each end are three pointed towers, the loftiest of which, in the centre of the E. or principal façade, is 210 ft. high and is surmounted by a colossal gilded figure (12½ ft. high) of the Angel Moroni (by *C. E. Dallin*).

The Interior (not accessible to strangers) is elaborately fitted up and artistically adorned. The Temple is used for the administration of ordinances, including marriage (for this world and the next, or for eternity

alone), baptism for the dead, prayer, theological lectures, preaching, teaching, ordinations, etc.

The **Assembly Hall** (Pl. B, 2), to the S. of the Tabernacle, is a granite building with accommodation for 3000 people, intended for divine service. — The famous *Endowment House*, which stood at the N.W. corner of the Temple Enclosure, has been pulled down.

At the corner of North Temple and Main Sts. stands the *Latter-Day Saints University* (Pl. C, 1), attended by over 1000 students. At the S.E. corner of Temple Square is the *Pioneer Monument*, surmounted by a copper *Statue of Brigham Young* (p. 501), which was unveiled in 1897 (50 years after the arrival of the first band of pioneers).

We now follow South Temple Street towards the E. To the right is the *Deseret News Block* (Pl. B, 2), a large brown-stone building where the oldest newspaper to the W. of the Missouri is published. To the left are the *Tithing Office* and *Tithing Storehouse* (Pl. C, 2), where the Mormons pay their tithes in kind. A little farther on, also to the left, are the *Lion House* (Pl. C, 2; with a lion over the entrance), one of the residences of Brigham Young; the *Office of the President of the Mormon Church;* and the *Beehive House* (Pl. C, 2; surmounted by a beehive, Utah's emblem), another of Brigham Young's houses. On the opposite side of the street (right) are the huge shoe-factory and warehouse of *Zion's Coöperative Mercantile Institution* (Pl. C, 2); the office of the '*Juvenile Instructor*'; the office of the *Historian of the Mormon Church;* and the *Gardo House* (Pl. C, 2), or *Amelia Palace*, opposite the Beehive House.

A little farther to the N.E., through the Eagle Gate, is *Brigham Young's Grave* (Pl. C, 2), surrounded by an ornamental iron railing.

About 1/2 M. to the N. of this point is *Prospect Hill* (Pl. C, 1), with a tower commanding an excellent *View of the city, its environs, and Salt Lake. Fort Douglas (see below) is seen to the E. — A still more extensive view is obtained from *Ensign Peak* (5050 ft.), which rises a little farther to the N. and may be ascended nearly all the way by carriage. To the N. lies *City Creek Canyon*, with some pretty scenery.

The imposing *City and County Building* is in Washington Sq. (Pl. C, 3), and the *Federal Building* (Pl. B, 3) is in Main St., between Third and Fourth South Sts. A new *Capitol* is in contemplation in *Capitol Grounds* (Pl. C, 1), near Prospect Hill (see above). Among the educational establishments are the *Utah State University* (330 students), to the E. of the city, near Fort Douglas, and the *High School* (Pl. B, 1), in Union Sq. The *Roman Catholic Cathedral* (Pl. C, 2) and several of the other *Churches* are also notable buildings. The *Exposition Grounds*, where annual fairs are held, are in *Agricultural Park*, near the banks of the Jordan (beyond Pl. A, 1).

On a plateau (500 ft.), 3 M. to the E. of the centre of the city, is **Fort Douglas** (comp. Pl. F, 1-4), a U. S. military post, reached by electric tramway (fare 5 c.). Fine views from the post and from the road to it. Parade and band-concert every afternoon.

*Great Salt Lake, the nearest point of which is 12 M. to the N.W. of Salt Lake City, is 80 M. long and 30 M. wide. Three small rivers flow into it, but it has no outlet and gets rid of its superfluous water by

evaporation. In early geological times it was a fresh-water lake ca. 1200 ft. in depth, with an outlet to the Pacific through the Snake River. Its water, which is extraordinarily buoyant, contains about 25 per cent of pure salt (ocean 3-4 p. c.; Dead Sea 24 p. c.). A bathe in it is very exhilarating, but bathers should be careful not to get any of the brine into their mouth or eyes. The lake contains several islands, the largest of which are *Antelope* and *Stansbury*. It is very shallow in places, and varies in depth and extent periodically. The tints of the water, especially at sunset, are often very beautiful. There is said to be a submarine volcano in the arm of the lake near Ogden (p. 461). The lake may be conveniently visited by taking the *Salt Lake & Los Angeles R. R.* to (14 M.) Saltair, a well-equipped bathing resort with a comfortable hotel.

The *Warm Sulphur Springs*, just to the N. of the city, and *Beck's Hot Springs*, 2 M. farther on, are frequented for their medicinal qualities.

Among the chief points of resort among the *Wahsatch Mts.* are the *Big Cottonwood Canyon* (Brighton's Hotel), a day's drive from the city; the *Little Cottonwood Canyon*; the *Weber* and *Ogden Canyons*, to the N. (p. 461); and the *American Fork* and *Provo Canyons*, to the E. of Utah Valley, to the S.

From Salt Lake City the *Western Pacific Railway* is being built towards San Francisco. — For the new 'Moffat Road' from Denver, see p. 475.

78. From Salt Lake City to Los Angeles.

781 M. San Pedro, Los Angeles, & Salt Lake Railroad in 25-32 hrs. (fare $ 30; sleeper $ 5.50). This new railway opens up a good mining region and materially shortens the journey from the East to Los Angeles.

The train starts from the *Oregon Short Line Station* (p. 499) and runs towards the S. 15 M. *Garfield* and (17 M.) *Smelter*, both with large smelting works; 79 M. *Boulter*. From (85 M.) *Tintic Junction*, in the Ophir and Tintic mining district, a branch-line runs to (50 M.) *Lehi*. At (118 M.) *Lynn Junction* we unite with the line coming from Salt Lake City viâ *Lehi Junction*. From (221½ M.) *Milford* a branch-line runs to (24 M.) *Newhouse* (a model mining-camp). 257 M. *Lund* and (289 M.) *Modena* are the usual starting-points for a visit to the upper valley of the **Virgin River**†, in S.W. Utah.

The stages (from Lund, 100 M., daily; from Modena, 65 M., daily) run across the lower end of the *Escalante Desert* to *St. George* (ca. 2800 ft.; St. George Ho., well spoken of), a small town of about 2500 inhab., with a mild and dry climate and more days of sunshine than any other spot in the United States. It is completely surrounded by high cliffs and mountains, the highest being the *Pine Valley Range* (ca. 10,000 ft.). Travellers who do not wish to be tied to the settlements should hire a conveyance and camp-outfit here. The valley contains some of the most extraordinary cliff and canyon scenery in the West, rivalling the Yosemite and the Grand Canyon. About 20 M. to the N.E. of St. George lies *Tokerville* (Stapley Ho.), and the entire stretch of river above this point is a wonderland of magnificent cliffs. There are two branches, called by the Indians *Paroonuweap* and *Mukoontoweap*. The latter is the remarkable valley named *Little Zion* by the Mormons, who have a settlement, *Springdale*, near its foot. The dominating note is the **Great Temple Butte* (7500 ft.; 4000 ft. above the river), a stupendous vertical mountain of bare rock, which rises at the junction of the two branches. The colours of this rock are as remarkable as the Titanic form; the red of the base merges into yellowish white at the top, with a supreme cap, on the plateau-like summit, of a dark red.

† The data for this account of the Virgin River Valley were supplied by *Mr. F. S. Dellenbaugh*, who visited it in 1903.

The colours vary with the light also. Throughout the region there is an extravagant play of colour, with very little green. Sheer precipices compose the sides of the Great Temple, which has never been surmounted. Everywhere are more or less vertical cliffs of startling proportions. There are no bridges over the river, which, however, is easily crossed, except in time of flood. Along this portion lie the villages of *Virgin*, *Grafton*, *Rockville*, and *Springdale* (p. 503), where accommodation may be obtained in small inns. Both branches of the river are accessible by waggon or on horseback for a considerable distance above the settlements. When the 'Narrows' of the Mukoontoweap are reached, farther progress is impossible, except on foot, as the walls approach to within 12-15 ft. of each other, and the canyon is more than 1500 ft. deep, the narrowest deep canyon in the country. The similar narrows of the Paroonuweap branch are harder to reach, as there is a dense growth of underbrush for several miles.

At (290 M.) *Crestline* we enter *Nevada* (p. 462). — 324 M. *Caliente* (4405 ft.), an oasis in the Nevada desert, is the junction of a short branch-line to *Pioche*. We here change from 'Mountain' to 'Pacific' time (comp. p. xiv). — 354 M. *Leith*. From (447 M.) *Las Vegas* the Las Vegas & Tonopah Railroad runs to (124 M.) *Rhyolite* (p. 463) and (197 M.) *Goldfield* (p. 463). — 480 M. *Jean*. At (494 M.) *Calada* we enter *California* (p. 463). 514 M. *Leastalk* is the junction of branch-lines to *Ivanpah* and *Goffs* (p. 484). 579 M. *Crucero*. At (623 M.) *Daggett* we join the Santa Fé R. R., following its tracks to (713 M.) *San Bernardino* and (716 M.) *Colton* (comp. pp. 484, 485). Near (724 M.) *Riverside* (p. 486) we cross the *Santa Ana River* by a great concrete viaduct, 1000 ft. long. 744 M. *Ontario* (p. 486); 750 M. *Pomona* (p. 486).

781 M. **Los Angeles**, see p. 531.

From Los Angeles the line goes on to its ocean terminus at (27 M.) *San Pedro* (comp. p. 534).

79. From San Francisco to Portland.

772 M. Southern Pacific Railway ('Shasta Route') in 34-36 hrs. (fare $ 20; sleeper $ 5). This line traverses some fine scenery and affords good views of *Mt. Shasta* (p. 505); some of the engineering difficulties were very great.

Steamers of the *Oregon R. R. & Navigation Co.* leave San Francisco every 5 days for Portland (2 days; fare $ 16, incl. berth and meals). The voyage is a pleasant one and usually calm in summer.

From *San Francisco* to (90 M.) *Sacramento* and (108 M.) *Roseville Junction*, see pp. 466-464. Our line here diverges to the left from that to *Ogden* and runs to the N., ascending the valley of the *Sacramento*, which flows at some distance to the left. 142 M. *Marysville* (65 ft.), a city of 3497 inhab., at the confluence of the *Feather* and *Yuba Rivers*. To the left rise the *Marysville Buttes* (1800-2100 ft.). At (163 M.) *Biggs* (95 ft.) we cross the Feather River. 186 M. *Chico* (190 ft.; 2640 inhab.; cars to Sacramento, see p. 465). A fine fruit-growing country is traversed. Near (213 M.) *Tehama* (220 ft.) we cross the Sacramento. From (225 M.) *Red Bluff* a stage runs daily to *Tuscan Mineral Springs* (Hotel, from $ 2), 9 M. to the E.

Beyond (260 M.) *Redding* (560 ft.), near the head of the Lower Sacramento Valley, we enter upon a stretch of very picturesque scenery

(observation-car), where the train crosses the winding Sacramento 18 times and threads 12 or more tunnels in 80 M. At (269 M.) *Copley* (600 ft.) the Indians spear salmon. Between (277 M.) *Kennet* (665 ft.) and (282 M.) *Morley* (720 ft.) the Sacramento is joined by the *Pitt River*. To the right rise the *McCloud Mts.* The *McCloud River*, which flows into the Pitt River, is one of the finest trout-streams in California. 298 M. *Delta* (1135 ft.), 302 M. *Lamoine*, and (311 M.) *Sims* are all good fishing-stations. To the left, near (318 M.) *Castle Rock* (2085 ft.; Hotel, $ 1½-2), rise the imposing **Castle Crags*, towering to a height of 4000 ft. above the river. Near (323 M.) *Dunsmuir* (2285 ft.) we obtain our first view of the huge snow-clad dome of *Mt. Shasta* (in front, to the right). 325 M. *Upper Soda Springs* (2360 ft.; Hotel, $ 2); 327 M. *Shasta Springs* (Hotel), with the pretty *Mossbrae Falls*. A little farther on we cross the Sacramento for the last time and ascend rapidly, round the **Great Bend*, to (333 M.) *Mott* (3155 ft.). — At (338 M.) *Sisson* (3550 ft.; *Sisson's Tavern, $ 2½), in *Strawberry Valley*, we enjoy a grand, unimpeded view of Mt. Shasta. To the left rise the *Scott Mts.* (*Mt. Eddy*, 9150 ft.).

The top of **Mt. Shasta* (14,380 ft.) is 12 M. from Sisson and may be ascended thence (there and back) in 30-36 hrs. (guides, horses, etc., at Sisson's Tavern; total expense $ 15-20 each). The night is spent at *Sisson's Camp* (9000 ft.), just above the timber-line. There is a Geodetic Monument on the main peak. Mt. Shasta is a huge extinct volcano, and its volcanic character is clearly discernible in the *Crater* or *W. Peak* (12,900 ft.), where there is a crater ¾ M. in diameter and 2500 ft. deep. Hot springs and solfataric action are also visible near the top of the main peak. The **View from the summit is very extensive.

From Sisson a branch-line runs to (18 M.) *McCloud* (Hotel, from $ 1½) and (37 M.) *Bartle*.

At (345 M.) *Black Butte Summit* (3905 ft.) the train reaches the summit of the pass across the N. part of the Sierra Nevada and begins its descent. To the right we obtain views of the five distinct cones of *Muir's Peak* or *Black Butte* (6500 ft.). The trees through which we run include the sugar pine (*Pinus Lambertiana;* with cones 12-18 inches long), the yellow pine *(P. ponderosa)*, the contorted pine *(P. contorta)*, the cembra pine *(P. flexilis)*, and the nut pine (*P. Sabiniana;* cones 12 inches long and 6 inches thick). — 350 M. *Weed.*

From Weed a branch-line, now open to (63 M.) *Dorris*, is being pushed forward to (ca. 83 M.) *Klamath Falls* (see below), between the *Upper* and *Lower Klamath Lakes*, which will then be the nearest station to (ca. 60 M.) Crater Lake (p. 506). The distance will be covered half by steamer on *Upper Klamath Lake* and half by stage or automobile.

355 M. *Edgewood* (2950 ft.) commands a good retrospect of Mt. Shasta. We now ascend the *Shasta Valley*, with the *Shasta River* at some distance to the right. From (377 M.) *Montague* (2540 ft.) a branch-line runs to (8 M.) *Yreka*. The *Siskiyou Mts.* (7660 ft.) are now visible to the left. — 390 M. *Thrall.*

From Thrall to Pokegama. 24 M., railway in 2 hrs. — From (12 M.) *Klamath Springs Station*, on this line, stages (fare $ 2½) ply to (8 M.) *Klamath Hot Springs* (2700 ft.; Hotel, $ 2-2½), at the junction of the *Klamath River* and *Shovel Creek*, a beautifully situated health and pleasure resort, with mineral springs and mud baths (efficacious in rheumatism, etc.).

Near (395 M.) *Hornbrook* (2150 ft.) we cross the *Klamath River* and begin to ascend the Siskiyou Mts. (gradient 4:100). Beyond (404 M.) *Cole* (2860 ft.) we enter *Oregon* ('Beaver State'). The line passes through a long tunnel just before reaching the summit at (414 M.) *Siskiyou* (4130 ft.). To the right is *Pilot Rock* (6430 ft.), the S. outpost of the *Cascade Mts.* (p. 444). — The train now descends rapidly, through tunnels and around curves, into *Rogue River Valley.* — 431 M. *Ashland* (1870 ft.; 2634 inhab.; Oregon Hotel, $2). *Mt. McLaughlin* (9760 ft.) rises to the right. — 443 M. *Medford* (1375 ft.) is the nearest station to (85 M.) the curious *Crater Lake.*

By previous arrangement an automobile may be had from Medford to the lake, going one day and returning the next, for $100 for 1-4 pers. ($10 each for each extra day at the lake; meals and lodging extra). There are two camps near the lake ($3). Launch on the lake $5 per hour. Row-boats also for hire. — *Crater Lake (6177 ft.) lies on the summit of the Cascade Mts., occupying the abyss formed by the subsidence of an extinct volcano of the size and height of Shasta. It is about 5 M. in diameter. Its most peculiar feature is the perpendicular enclosing wall of igneous rock, 500-2000 ft. high. There is no visible affluent or outflow, but the water is fresh and sweet and of a phenomenally clear ultramarine hue. The lake has now been stocked and affords excellent fishing. It is 2000 ft. deep. **Wizard Island*, on the W. side of the lake, 845 ft. high, is an extinct volcanic cone and is a curious instance of a crater within a crater. The road to the lake is fair, and the descent to the water's edge may be made in about ½ hr. The district containing this lake has been set apart as the *Crater Lake National Park.*

Beyond Medford, to the right, stands *Table Rock.* 475 M. *Grant's Pass* (935 ft.); 500 M. *Glendale* (1415 ft.; Hatch, $2), a good place to break the journey for those who do not wish to travel by night; 552 M. *Myrtle Creek* (615 ft.); 574 M. *Roseburg* (465 ft.; 1690 inhab.), on the *Umpqua River.* To the right is *Diamond Peak* (8807 ft.), and farther on, on the same side, are the *Three Sisters* (8500 ft.). From (610 M.) *Drain* a new branch-line runs to *Marshfield*, on *Coos Bay.* Beyond (648 M.) *Eugene* (425 ft.), the seat of the University of Oregon (735 students), we descend the pretty and well-wooded valley of the *Willámette* (left). 666 M. *Harrisburg* (310 ft.). — 692 M. *Albany* (215 ft.) is the junction of a line to (12 M.) *Corvallis* and (83 M.) *Yaquina*, on *Yaquina Bay* (p. 508). — 719 M. **Salem** (165 ft.; *Willamette Hotel*, $2-3), the capital of Oregon, a small city with 10,422 inhab., the *State Capitol*, and various other State buildings and institutions. — 756 M. *Oregon City* (75 ft.), with 3494 inhab., possesses a fine water-power supplied by the *Falls of the Willamette* (40 ft.). — 771 M. *East Portland* (30 ft.). We cross the Willamette.

772 M. Portland (**The Portland*, from $3, R. from $1; *The Oregon*, *The Eaton*, R. from $1; *Imperial*, R. $1-2; *Perkins*, R. from $1; *The Lenox*, R. from $1; *Grand Central;* Brit. Consul, *Mr. James Laidlaw*), the business capital of the Pacific North-West, is advantageously situated on the Willamette, 6 M. above its confluence with the *Columbia.* Pop. (1900) 90,426, including *East Portland* and *Albina*, now incorporated with the city (prob. now double). These figures include about 3000 Chinese. Its position at the head of deep-sea

navigation on the Columbia and Willamette and its extensive railway connections with the N., E., and S. have made Portland an important commercial centre, and it ranks among the wealthiest cities of its size in the country.

Portland was first settled in 1843, and its growth since then has been rapid and uninterrupted. The annual value of its exports now amounts to about $ 15,000,000 (3,000,000 *l.*), the chief articles being wheat, lumber, flour, wool, and fish (salmon, etc.). About 640,000,000 ft. of lumber were cut here in 1906. It manufactures pig iron, woollen goods, flour, furniture, beer, cordage, and other goods to the annual value of $ 35,000,000 (7,000,000 *l.*). It has steamship lines to San Francisco and other ports on the Pacific Coast Puget Sound, British Columbia, Alaska, China, and Japan, while its sailing vessels ply to Great Britain, China, South America, and New York. — The annual rainfall at Portland is 46 inches. — Portland calls itself the 'Rose City', and a 'Rose Festival' is held here in the first week of June.

'*Seeing Portland*' *Observation Cars*, starting at the corner of Second and Washington Sts., visit the chief sights twice daily (fare 50 c.).

The Union Railway Station, at the corner of N. 6th and Irving Sts., is a roomy and handsome building, with a tall clock-tower. About $^3/_4$ M. to the S. of it, in the block enclosed by Jefferson, Madison, 4th, and 5th Sts., is the City Hall, containing the *Oregon Historical Society's Museum* and the *Hawkins Museum of Natural History*. Other important edifices in the business part of the city are the *Chamber of Commerce* (cor. 3rd and Stark Sts.; with an *Intelligence Bureau* for strangers), the *Post Office* (cor. Morrison and 5th Sts.), the *Custom House* (11th and Everett Sts.), the *Court House* (cor. Main and 4th Sts.), the tall *Wells Fargo Co.'s Building* (cor. 6th and Oak Sts.), the *Commercial Club Building* (cor. 5th and Oak Sts.), the *Corbett Building* (cor. Morrison and 5th Sts.), the *Masonic Temple* (cor. Park and Yamhill Sts.), the *Daily Oregonian Office* (cor. of 6th and Alder Sts.), and the *Marquam Block* (Morrison and 6th Sts.). The *Portland Library*, Stark and 7th Sts., is a tasteful Romanesque building. The *Art Museum* (cor. 5th and Taylor Sts.), erected by the Portland Art Association in 1905, has a good collection of casts and photographs, and holds frequent loan exhibitions. The most notable churches are the *Presbyterian Church* (cor. of Alder & 12th Sts.), the *White Temple* (Baptist; cor. of Taylor & 12th Sts.), and the new Episcopal *Cathedral* (cor. of 19th & Everett Sts.).

The Willamette, which is lined with docks, warehouses, and sawmills, is spanned by four bridges connecting the suburbs to the E. with the business and old residential districts to the W. of the river. The finest residences are on the *King's Hill*, *Couch Addition*, *Portland Heights*, and *Willamette Heights* on the W. side, and in *Hawthorn Avenue* and *Irvington* on the E. side. At the foot of Willamette Heights is the site of the Centennial Exposition of 1905, held to commemorate the crossing of the Continent by Lewis and Clark in 1805. Here still stands the *Forestry Building*, made of logs from 2 to 6 ft. in diameter, containing in all over 1,000,000 ft. of lumber. The upper part of King's Hill is occupied by the *City Park*, easily accessible by the Washington St. trolley-cars and well worth a

visit. It contains buffalo, bear, and deer. To the N.W. is the wilder scenery of *McClay Park*, with a deep canyon and primitive forest, through which passes the attractive *Cornell Road*. The *Riverside Drive*, to the S. of the city, along the Willamette, is also picturesque.

The visitor to Portland will, however, best use his leisure by ascending the *Portland Heights* on the W. side of the city (easily reached on foot or by tramway) for the sake of the magnificent *Mountain View they command.

Mt. Hood (see below), 60 M. to the S.E., is the most prominent peak, but the rounded dome of *Mt. St. Helens* (p. 447; 50 M. to the N.), *Mt. Adams* (p. 444), and *Mt. Rainier* (p. 446) are visible, and the view also includes the *Coast Range* and the valleys of the *Columbia* and *Willamette*. The best reant for this view is *Council Crest* or *Fairmount* (1000 ft. above the city), poiched by electric tramway in 20 minutes. Practically the same view may be had from the fine driveway called the *Boulevard* that now encircles the hills a little below the top, about 800 ft. above the city.

Portland is the headquarters of the *Mazamas*, an Alpine Club (200 members) founded in 1894, which has done much to make the mountain-scenery of the Pacific North-West better known through its periodical the *Mazama* and in other ways (annual dues $3).

Excursions from Portland.

The favourite excursion from Portland is the voyage up the *Columbia River to (60 M.) the *Cascades* and to (110 M.) *The Dalles* (fare $1; return fare $2; comp. pp. 468, 469; Or. R. R. & Nav. Co. Office, cor. of 3rd and Washington Sts.). The traveller may take the train to Dalles, spend the night there, and return next morning by the steamer (return-fare $4). If the trip is made only one way, the steamer should be preferred, as the scenery is not seen to the best advantage from the train. The boats leave early in the morning; the local time-tables should be consulted in advance. On the way we pass (18 M.) *Vancouver* (also reached by electric car in 1/2 hr.), the military headquarters of the Department of the Columbia.

Steamers (office as above) also descend the Lower Columbia to (98 M.) *Astoria* (ca. 5 hrs.; return-fare $2½), affording a good view of the wide estuary of a great river. A visit to a *Salmon Cannery* may be combined with the trip. Astoria may also be reached by the *Astoria & Columbia River R.R.* (100 M.). — Astoria (*Occident Hotel*, $2-3; Brit. vice-consul, *Mr. P. L. Cherry*), a small seaport with 8381 inhab., formerly famous for its fur-trade, has 3 M. of wharves on the Columbia. A steamer plies hence across the Columbia to (3/4 hr.) *Megler*, whence a railway runs, viâ (14½ M.) *Ilwaco* (with large canning factories), to the various resorts on *Long Beach* (Breakers Hotel, etc.) in Washington, which extends for 23 M. along the Pacific (return-fare from Portland $4). To the S., 16 M. by railway, lies *Clatsop Beach* or *Seaside* (hotels; return-fare from Portland $4). During spring and early summer, excursions are run from Astoria to *Sand Island*, at the mouth of the Columbia, to witness the seining of the salmon.

The Willamette affords another pleasant trip, steamers plying regularly to *Oregon City* (p. 506), *Dayton*, and *Corvallis* (p. 506).

*Mt. Hood (11,225 ft.) is conveniently ascended from Portland by taking the train to (66 M.) *Hood River* (comp. p. 469; return-fare from Portland to Cloud Cap Inn, $9½).

Mt. St. Helens (a more or less active volcano), *Mt. Adams*, *Mt. Jefferson*, and the *Three Sisters* may also be visited from Portland; but the trails are rough, and camping out is necessary in each case.

Among other points of interest visited from Portland are the *Multnomah Falls* (p. 470), *Crater Lake* (p. 506), and *Yaquina* (p. 506), *Newport* (Ocean House, $2), and other places on *Yaquina Bay* (3 hrs. by train; return-fare $6).

From Portland to *Tacoma* (for *Seattle*, *British Columbia*, *Alaska*, etc.), see pp. 447-446; to *Omaha* and the *East*, see R. 74.

Places of Amusement. *Van Ness Theatre* (Pl.
Ave. and Grove St.; *American Theatre* (Pl. F, 4), Market St., cor. 7th St.;

see pp. [illegible], to *Omaha* and the *East*, see R. 74.

80. San Francisco.

Arrival. *Railway Passengers* from the N., E., and S. leave the train at *Oakland* (see p. 466) and reach San Francisco at the *Union Ferry Depot* (Pl. G, 2), at the foot of Market St., where cabs (1-2 pers. $ 2, 3-4 pers. $ 2½), hotel-omnibuses (50 c.), and cable and electric cars (5 c.) meet the steamer. — Those arriving by sea are met by similar conveyances. — The *Southern Pacific Railway Station* (Pl. G, 4), at the cor. of 3rd and Townsend Sts., is used by trains to and from Menlo Park, Santa Clara, Santa Cruz, San José, Tres Piños, Monterey, Paso Robles, Los Angeles, and other points in the S. part of California (comp. p. 521). The temporary depot of the *Ocean Shore Railway*, for trains to Half Moon Bay and Santa Cruz (comp. p. 521), is at the cor. of 12th and Mission Sts. (Pl. E, 5; permanent depot building at the cor. of Market and 11th Sts., Pl. E 4, 5).

Hotels. *Fairmont (Pl. f, F 2; 600 beds), a colossal structure, with a fine outlook, covering with dependencies the square bounded by Clay, Sacramento, Mason, and Powell Sts., R. from $ 3; *St. Francis (Pl. c, F 3; 650 beds), Union Square, R. from $ 2; Palace (Pl. k; G, 3), at the corner of Market St. and Montgomery St. (rebuilding); Stewart, 353 Geary St. (Pl. D-F, 3), R. from $ 2; Bellevue (Pl. l; F, 3), cor. of Geary and Taylor Sts.; Normandie (Pl. n; E, 3), cor. of Sutter and Gough Sts., R. from $ 2; Granada, cor. of Sutter and Hyde Sts. (Pl. E, 3); Colonial, Stockton St., near Sutter St. (Pl. F, 3), R. from $ 2; Majestic (Pl. m; D, 3), Sutter and Gough Sts., R. from $ 2; Majestic Annex (Pl. n; D, 3), 1529 Sutter St., from $ 4; Jefferson (Pl. j; E, 4), Turk and Gough Sts., facing Jefferson Square, from $ 4, R. from $ 2; Savoy (Pl. a; E, 4), Van Ness Ave. and Ellis St., R. from $ 1; Imperial (Pl. i; E, 4), 951 Eddy St., R. from $ 1½; St. James (Pl. b; E, 4), Van Ness Ave. and Fulton St., R. from $ 1½; Grand Central (Pl. g; E, 4), Market, Polk, and Hayes Sts., R. from $ 1½; Audubon, 928 Ellis St. (near Van Ness Ave.), R. from $ 1½. — **Family Hotels** (special terms for prolonged stay). Dorchester (Pl. d; D, E, 3), Sutter and Gough Sts.; Atherton, 1661 Octavia St.

Restaurants (the San Francisco restaurants are generally excellent, but the prices, once so moderate, are now similar to those in the larger Eastern cities). At the *Fairmont*, *St. Francis*, *Majestic*, and other hotels (see above); *Tait's*, 239 Post St.; *Thompson's*, 1727 O'Farrell St.; *Blanco's*, 859 O'Farrell St.; *Marchand*, 1424 McAllister St.; *Old Poodle Dog*, 326 Bush St.; *Jack's*, 1025 Golden Gate Ave.; *Bismarck*, 4th and Market Sts.; *The Peacock*, 743 Market St.; *Mathias* (Mexican), 525 Broadway; *La Madrileña* (Spanish), 1031 Golden Gate Ave.; *Coppa's* (Ital.), 423 Pine St. (other good Ital. restaurants in Broadway, near Montgomery St.). — Places frequented by ladies are the *Woman's Exchange*, 1563 Bush St.; *Swain's*, Van Ness Ave., near Sutter St.; *The Golden Pheasant*, 1222 Sutter St.; *Puritan*, 761 Market St. — The *Chinese Restaurants* in Dupont St. (Pl. F, 2) are interesting.

Tramways. An excellent system of *Electric* and *Cable Cars* (fare 5c.) traverses all the main thoroughfares and neutralizes the steepness of most of the streets (comp. p. 511). An elaborate system of transfers makes it possible to go from almost any point in the city to any other point for a single fare. The stranger should visit one of the 'Cable Power Houses' (*e.g.* at the cor. of Hyde and California Sts., Pl. E, 3) or the main 'Electric Power House' at North Beach (reached by the Fillmore St. cars). Permits to view these houses may be obtained from the Engineers in charge. Extensions of these lines to Sutro Heights, etc., see p. 516. — *Observation Cars* (fare 50 c.; comp. p. 19), starting at the Union Ferry Depot (p. 512) several times daily, traverse 20 M. of streets, stopping at the Mission (p. 514), the Affiliated Colleges (p. 514), and the Cliff House site (p. 516), and affording a good general survey of the city.

Cabs. Per hour, 1-2 pers. $ 1½, 3-4 pers. $ 2½, each addit. hr. $ 1, $ 2. Heavy baggage is usually transported by the transfer companies. — Ferries, plying from the foot of Market St., see p. 517.

Places of Amusement. *Van Ness Theatre* (Pl. E, 4), cor. Van Ness Ave. and Grove St.; *American Theatre* (Pl. F, 4), Market St., cor. 7th St.;

Colonial Theatre (Pl. F, 3), Mason St.; *Empire Theatre*, Sutter St., between Fillmore and Steiner Sts. (Pl. D, 3); *Alcazar Theatre* (Pl. C, D, 3), cor. Sutter and Steiner Sts. (stock company); *National Theatre*, cor. Post and Steiner Sts. (Pl. D, 3); *Novelty Theatre* (Pl. D, 4), cor. O'Farrell and Steiner Sts. (melodrama); *Orpheum* (Pl. F, 3), O'Farrell St. (vaudeville); *Princess Theatre*, Ellis St., between Fillmore and Steiner Sts. (Pl. D, 4); *Central Theatre*, Market St., near 8th St. (Pl. E, 4). The *Chinese Theatres* have not been rebuilt. — *Racecourses* at Ingleside, to the S. of the Affiliated Colleges (p. 514), at Emeryville, Oakland, and at Tanforan, in San Mateo County. These three tracks, belonging to the California Jockey Club (racing season from Nov. to May), are for running horses only. There is a training track for trotters at Alameda. — *Golf Links* at Ingleside and at Oakland. — *Public Tennis Courts* in Golden Gate Park. — *Sutro Heights*, see p. 516.

Baths. Salt-water baths may be obtained at the *Sutro Baths* (p. 516); at the *James Lick Baths*, 165 Tenth St.; and at the *Harbour View Baths*, on the beach near Baker St. *Turkish Baths* at 11 Grant Ave., 222 Post St., and 415 Sutter St.

Clubs. *Pacific Union*, 1882 Washington St.; *Union League*, cor. of Sacramento and Franklin Sts.; *Bohemian*, cor. of Post and Leavenworth Sts. (literary men, artists, actors, etc.); *Cosmos*, 1534 Sutter St.; *Olympic* (athletic), 524 Post St.; *University*, 1817 California St.; *Press*, 2016 Pine St.; *Family Club*, 1900 Franklin St.; *Athenian*, 1988 Bush St.; *Merchants'*, Merchants' Exchange Bldg.; *California Camera Club*, 2206 Steiner St.; *Francisco Verein* (German), cor. of Post and Leavenworth Sts.; *Ligue Nationale Française*, 135 Geary St.; *Cercle Français*, 336 Post St. (these two French); *Concordia* (Hebrew), N.E. cor. of Pacific Ave. and Fillmore St.; *Sierra Club*, for exploring, protecting, and making accessible the scenery of the Pacific Coast (secretary, W. E. Colby, 302 Mills Bldg.; sub. $3, entry-fee $2). — **Women's Clubs.** *Century*, 2015 Sutter St.; *California*, 1750 Clay St.; *Corona*, 2668 Mission St.; *Sorosis*, 1620 California St.; *Town and Country*, 1916 Franklin St.; *Francisca*, 1750 California St.

Booksellers. *Paul Elder & Co.*, cor. Bush St. and Van Ness Ave. (also specialties in arts and crafts); *A. M. Robertson*, Van Ness Ave.; *Isaac Upham Co.*, 104 Battery St.; *New Book Store*, 23 Grant Avenue.

Learned Societies and Libraries. *Geographical Society of California*, 611 Van Ness Ave.; *Society of California Pioneers*, 1832 O'Farrell St.; *Mechanics Institute and Library*, 99 Grove St.; *Free Public Library*, 16th and Market Sts. (51,000 vols.); *Academy of Pacific Coast History*, Berkeley (Prof. H. Morse Stephens, Secretary); *Academy of Sciences*, Market St., near 4th St. The historical student would also be interested in the old Spanish grants in the Office of the Surveyor General. — All of these societies and libraries lost their collections either entirely or in large part during the fire; much, however, has already been done to replace the losses.

Tourist Agents. *Raymond & Whitcomb Co.*, Monadnock Bldg.; *Thos. Cook & Son*, 32 Powell St. — **Information and Statistical Bureau:** *California Promotion Committee*, Union Square (free).

Post Office (Pl. F, 4), at the cor. of Mission and 7th Sts. (open 7.30 a.m.-11 p.m.; Sun. 12-1.30 p.m.). *Branch Offices* (53 in number) at the Union Ferry Depot; cor. of 3rd and Townsend Sts.; cor. of Franklin St. and Fern Ave.; cor. of 17th and Castro Sts.; 602 Hayes St.; 1208 Masonic Ave.; etc.

River Steamboats for Sacramento, Stockton, and Vallejo, daily, from piers immediately to the S. of Union Ferry Depot. — **Steamships.** *Oceanic S. S. Co.* to Honolulu and Tahiti (Pier No. 7, foot of Pacific St.; office 673 Market St.); *Pacific Mail S.S. Co.* to Panama, Honolulu, Japan, and China (pier foot of 1st and Brannan Sts.; office, 384 Flood Building); *Oriental S. S. Co.* to Honolulu, Yokohama, and Hongkong (pier, foot of First and Brannan Sts.; office, 240 Flood Building); *Pacific Coast S. S. Co.*, coast-line (for Santa Barbara, Los Angeles, and San Diego, Thurs. and Sat., Pier 19, foot of Union St.; for Puget Sound and Alaska, Pier 9, foot of Broadway); and many others.

Consuls. British Consul-General, *Mr. W. R. Hearn*, 268 Market St.; Consul, *Mr. Wellesley Moore*. German Consul, *Mr. Franz Bopp*, 51 Third St.

San Francisco, the largest city of California and the Pacific Coast and the ninth city of the United States, is grandly situated in 37° 47′ N. lat., at the N. end of a peninsula 30 M. long, separating the Pacific Ocean from *San Francisco Bay* (see p. 517). The city lies mainly on the shore of the bay and on the steep hills rising from it, but is gradually extending across the peninsula (here 6 M. wide) to the ocean. On the N. it is bounded by the famous **Golden Gate*, the narrow entrance (1 M. across) to San Francisco Bay. A large part of the city was destroyed by fire in 1906 (see below), but the business district has already been largely rebuilt in an improved manner. In 1900 it contained 342,782 inhab., including about 10,000 Chinese (comp. p. 515) and 3500-4000 Japanese. The population in 1908 was estimated at 480,000.

The *Mission of San Francisco* (see p. 514) was founded by the Mexicans in 1776, but the modern city really sprang from the village of *Yerba Buena* ('good herb', *i.e.* wild mint), founded in 1835, about 3 M. to the W. In 1846 Yerba Buena came under the American flag, and in the following year its name was changed to *San Francisco*. In 1848, the year of the discovery of gold in California, its population was about 500; in 1850 it was about 25,000, and each subsequent decade has seen an extraordinary increase (56,802 in 1860; 149,473 in 1870; 233,956 in 1880; 298,997 in 1890). San Francisco received a city-charter in 1850, but its corrupt municipal government led in 1856 to the formation of a Vigilance Committee, which took the law into its own hands and made a very thorough reformation. History is now, to some extent, repeating itself, as the corrupt practices of political bosses and of some of the city officials during the years before the great earthquake have again led the better-class citizens to attempt a thorough purification of their municipal government. — To make the present site of San Francisco suitable for a large city, an immense amount of work had to be done in cutting down hills and ridges, filling up gullies, and reclaiming the mud flats on the bay(comp. p. 260). The city, however, is still remarkably hilly; and one of its most characteristic sights is the cable and electric cars crawling up the steep inclines like flies on a window-pane.

The Climate of San Francisco is wonderfully equable. The mean annual temperature is about 55° Fahr., and no month varies to any great extent from this average. September has the highest average (about 59°), and a few hot days (80-90°) occur about midsummer. The mean temperature of January is about 49°. Visitors should always have warm wraps at hand, especially in the afternoons of early summer, when a strong wind usually blows in from the sea. The annual rainfall is 25 inches.

Earthquakes occur occasionally in San Francisco, but have seldom been destructive. About 5 a.m. on April 18th, 1906, however, a severe earthquake visited San Francisco, lasting for about a minute and doing a great deal of damage. Streets cracked, chimneys fell, and some of the poorer wooden buildings were overthrown. The City Hall became a mass of ruins, but, on the whole, few of the more solid structures were seriously injured. Unfortunately, however, fires broke out, soon passing beyond control owing to the injury done to the water-mains by the earthquake, and raging for three days. These destroyed an area of over 4 sq. M., including the whole of the business district and the older residential quarters. The burned district is roughly bounded by the water-front on the N. and E., by Octavia and Dolores Sts. on the W., and by Townsend St. on the S. The docks and the buildings on Telegraph Hill (Pl. F, G, 1, 2) and Russian Hill (p. 513) escaped, while the Mint, Post Office, and Appraisers Stores were also saved. The loss of property was estimated at $ 350,000,000 (70,000,000*l.*). About 425 people lost their lives. The work of rebuilding was begun at once, and more than $ 130,000,000 were spent on new buildings within

two years of the fire. Comp. 'The California Earthquake of 1906', edited by *David Starr Jordan* (1906).

The Commerce of San Francisco is extensive, the annual value of its exports and imports amounting to about $ 130,000,000. Among the chief exports are gold and silver, wine, fruit, wool, oil, lumber, flour, and bread-stuffs; the imports include coal, timber, rice, sugar, tea, and coffee. The Manufactures include iron, flour, silk and woollen goods, canned fruits and vegetables, leather and shoes, liquors, ship-building, meat-packing, carriages, silver-ware, sugar, glass, brass, machinery, cigars, cordage, etc., and had in 1900 a value of $ 133,070,000 (now estimated at more than double). Industry was much stimulated by the recent discovery of oil in the State, affording a cheap and admirable fuel (36,000,000 barrels produced in 1906).

The Population is very heterogeneous, every European nationality being represented here, to say nothing of the Mexicans, Chinese (p. 515), Japanese, Africans (relatively few), Filipinos, Hawaians, and other non-European races.

Market Street (Pl. G-D, 2-6), the chief business-thoroughfare, extends to the S.W. from the ***Union Ferry Depot** (Pl. G, 2), a handsome structure by *A. Page Brown*, with a tower 250 ft. high, to a point near the twin *Mission Peaks* (935 ft.), a distance of about $3\frac{1}{2}$ M.

The Ferry Depot contains the *Alaskan Museum* (upper floor; open free on Mon., Wed., & Frid., 9-5); the *Agricultural Collections of the Board of Trade;* and the *State Mining Bureau*, with an interesting collection of Californian minerals and relics (these two open free on week-days, 9-5).

Following Market St. towards the S.W., we pass, at the intersection with Battery St., the *Labour Monument*, a vigorous bronze group by Douglas Tilden (1899), dedicated to the memory of Peter Donahue of the Union Iron Works (p. 517). At the S.W. corner of Market and Montgomery Sts. (Pl. G, 3) stands the *Palace Hotel* (p. 509), opposite which is the *Union Trust Building*, the first of the buildings whose steel and concrete frame withstood the fire. Close by, at the corner of Montgomery and Post Sts., are the *Crocker Building*, another survivor, and the new stone structure of the *First National Bank* (Pl. F, G, 3). At the corners of Kearny and 3rd Sts. rise the *Chronicle Building* (Pl. F, 3) and the tall *Spreckels* or *Call Building* (Pl. F, 3; 300 ft. high), the top of either of which affords a good bird's-eye view of the city.

This view, an excellent way to begin the inspection of the city, may be supplemented by following Kearny Street (Pl. F, 3-1), in which many of the best shops were situated before the fire, to *Telegraph Hill (Pl. F, G, 1, 2; 295 ft.), which commands a good view of the Golden Gate (p. 511), the water-front of the City, the Bay, Mt. Tamalpais (N.W.; p. 517), Mt. Diablo (N.N.E.; p. 519), etc. At the junction of Kearny and Market Sts. is a *Fountain*, presented to the city by Mme. Lotta, the actress, in 1875.

Continuing to follow Market St. towards the S.W. from the Chronicle Building, we pass many large office-buildings. No. 783 is the tall *Humboldt Savings Building*. At the corner of 4th St. is the *Pacific Building*, a huge structure of re-enforced concrete, with a façade of green and brown tiles. In the same block is the *Emporium*, the 'Whiteley's' of San Francisco, which has been rehabilitated since the disaster of 1906. On the right, at the corner of Powell St., is the large *Flood Building* (Pl. F, 3), another survivor of the fire. It is chiefly occupied by railway-offices.

Powell St. leads to Union Square (Pl. F, 3), with the *St. Francis Hotel* (p. 509) and a *Naval Monument* commemorating the exploits of the U. S. fleet in the Philippines during the war with Spain (1898).

At the junction of Market St. with Mason St. (Pl. F, 3, 4) is a *Monument*, by Douglas Tilden, commemorating the admission of California to the Union (1850). — To the left, at the corner of 7th St., we catch a glimpse of the long frontage of the *Post Office* (Pl. F, 4; p. 510), with its fine granite carvings. — Just beyond this corner we, reach a small triangular park, with the large *Californian Monument*, designed by Frank Happersburger and presented to the city by Mr. James Lick (comp. p. 523). Adjoining this park, on the spot that served as the pioneer burial-ground of Yerba Buena (comp. p. 511), stand the ruins of the large **City Hall** (Pl. E, 4). At the junction of Van Ness Ave. and Market St. (Pl. E, 4, 5) is a *Monument* to the Volunteers of the Spanish-American War. At the corner of 11th St. is the *Station of the Ocean Shore Railway* (p. 509).

The **U. S. Branch Mint** (Pl. F, 4), in 5th St., at the corner of Mission St., contains interesting machinery and a collection of coins and relics (open Mon.-Frid., 9-11 & 1-2). In 1906 it coined bullion to the value of $52,866,741 in U. S. currency, besides 'Philippine money' to the value of 1,451,000 pesos. The effect of the fire may be clearly seen on the granite at the N. end of the building.

The visitor may now return to Montgomery St. (Pl. F, G, 3-1), which, with the S. part of Sansome St. (Pl. G, 2, 3), forms the centre of the banking district. Passing the *Union Trust Building* (p. 512), we come to a series of large office-buildings, of which the most important are the *Mills Building*, cor. of Montgomery and Bush Sts.; the *Merchants Exchange* (Pl. G, 2), California St., near Montgomery St. (excellent survey of the lower part of burnt district from the roof); *Kohl Building*, cor. Montgomery and California Sts.; *Italian American Bank*, a one-story building with Doric columns, cor. Montgomery and Sacramento Sts.; and the *Bank of Italy*, cor. Montgomery and Clay Sts. At the N.E. corner of Sansome and California Sts. rises the tall *Alaska Commercial Building*, with the handsome *Bank of California* (Pl. G, 2) opposite. One of the districts spared by the great fire is the square bounded by Montgomery, Washington, Battery, and Jackson Sts., containing the *U. S. Appraisers Stores* and the large new *Custom House* (Pl. G, 2). Washington St. from Montgomery St. to the water-front is given up to the wholesale fruit and vegetable trade. — In Portsmouth Square (Pl. F, 2), bounded by Washington, Dupont, Kearny, and Clay Sts., is a monument (by Bruce Porter and Willis Polk) to *Robert Louis Stevenson* (1850-94), in the form of a Spanish galleon on a granite pedestal. — A little to the N.W. is Washington Square (Pl. F, 1, 2), near which is *Russian Hill* (W.), the name of the latter keeping alive the memory of the Russian traders. This was one of the few points to the E. of Van Ness Ave. that escaped the general conflagration.

One of the most interesting historical relics of San Francisco is the old **Mission Dolores** (Pl. D, 6; see p. 511), at the corner of Dolores and 16th Sts. (reached by 16th St. cars, with transfer from Valencia St. or Mission St. lines). The old church (open on Sun., 9-11), dating from about 1778, is built of adobé ('adóby'), and is adjoined by a tangled and neglected little churchyard, in which is the grave of Don Luis Antonio Arguello, the first Mexican governor. The superstitious believe that divine intervention stayed the fire at this point. Opposite is the *College of Notre Dame* (R. C.).

For an account of the old missions of California, see 'In and Out of the Old Missions of California', by *George Wharton James* (1906), and 'The Missions of California', by *Jesse S. Hildrup* (1907).

Among the educational institutions of San Francisco may be mentioned the *Cooper Medical College* (Pl. D, 3); the imposing buildings of the *Medical Department of the University of California*, known as the *Affiliated Colleges*, near Golden Gate Park (Pl. A, 5; comp. p. 466); the *Cogswell Polytechnic School* (cor. Folsom and 26th Sts., beyond Pl. E, F, 7); the *California School of Mechanical Arts* (Pl. F, 6), Utah St., founded by Mr. James Lick (p. 523); the *Boys' High School*, Sutter St. (Pl. D, 3); the *Girls' High School* (Pl. C, 4); and the *Mission High School* (Pl. D, 6), an attractive building at the corner of 18th and Dolores Sts. San Francisco possesses numerous *Kindergartens*, 20 of which are endowed in perpetuity.

The ***Presidio** (Pl. A, B, 1, 2), or *Government Military Reservation* (best reached by the Union St. cars), garrisoned by two regiments of U. S. infantry, besides cavalry and coast artillery, has an area of 1500 acres and stretches along the Golden Gate for about 4 M. Its walks and drives afford beautiful views, the finest, perhaps, being that from *Fort Point* or *Winfield Scott*. A military band plays at the Presidio on Frid. afternoon. Daily drills are held from 9 to 11 a.m. The hills facing the Golden Gate on both sides of the Bay are strongly fortified with batteries of mortars, disappearing guns, and coast-defence guns of heavy calibre, many of which are seen on the visit to the Presidio. — There is another small military reservation at *Black Point* (Pl. D, 1; reached by Polk St. and Larkin St. cars), with *Fort Mason*, the residence of the commanding general of the department of California.

'Nob Hill' was the name given about 1870 to that section of California Street between Powell St. and Leavenworth St. (Pl. E, F, 2, 3), as containing many of the largest private residences in San Francisco. Most of these were of wood, and no expense was spared to make them luxurious dwellings, but with unfortunate architectural results. Few relics of these are now extant. The hill is crowned by the huge *Fairmont Hotel* (p. 509; *View), opposite which is the *Hopkins Institute of Art* (Pl. F, 3).

The present fashionable residential quarter is on Pacific Heights, including the W. parts of Jackson St., Washington St., Pacific Ave., and Central Ave. (Pl. D, C, 3).

At the corner of Lyon & Washington Sts. (Pl. C, 3) is the tiny *Swedenborgian Church*, containing simple yet fine wood-work and adorned with beautiful paintings by Wm. Keith and good stained glass by Bruce Porter.

The **Chinese Quarter**, rebuilt since the fire, is still one of the most interesting and characteristic features of San Francisco. It lies, roughly defined, between Stockton, Sacramento, Kearny, and Pacific Streets (comp. Pl. F, 2) and now consists mainly of large modern store buildings in a (much modified) Oriental style, and of tall tenements, swarming with Chinese occupants.

Chinatown contains about 10,000 inhabitants, their numbers having been lessened of late years by the working of the Exclusion Act. A large proportion of these are men, and children are scarce. There are several *Chinese Missions* with schools, etc.

To the N. of Chinatown, spreading about the base of Telegraph Hill, is the so-named *Latin Quarter*, peopled by Italians, Greeks, and Mexicans. Their houses, shops, and restaurants are most characteristic. The *Japanese Quarter* is bounded by Van Ness, Fillmore, Geary, and Pine Sts. (Pl. D, E, 3).

The largest of the public parks of San Francisco is ***Golden Gate Park** (Pl. A, B, 5, 6; reached by several lines of electric and cable cars), which extends from Stanyan St. to (3 M.) the Pacific Ocean, with an area of 1013 acres and a width of ½ M. It is prolonged towards the E. by the long and narrow 'Pan Handle' (comp. Pl. B, C, 5). The park is tastefully laid out and planted with trees (eucalyptus, Monterey cypress, Monterey pine, etc.). It contains monuments to *President McKinley* (by Robert I. Aitkin; at the Baker St. entrance), *Gen. Halleck*, *Francis Scott Key* (author of the 'Star-Spangled Banner'; by W. W. Story), *President Garfield*, *Thomas Starr King* (by Daniel C. French), *Balboa* (by Linden), *Padre Junipero Serra* (p. 525; by Douglas Tilden), and *President Grant*. Noteworthy also are the *Baseball Pitcher* (by Douglas Tilden) and the *Goethe-Schiller Monument* (a replica of that by Rietschel at Weimar). The park also contains the *Crocker Conservatory* (Pl. A, 5), with specimens of the Victoria Regia lily and other rare exotics; a children's playground; tennis-courts; an interesting aviary; parks of buffalo, deer, and elk; an arboretum; and a charming Japanese tea-house and garden. Here, too, is the Art Gallery of the Midwinter Exhibition of 1894, now containing an interesting *Museum* (daily, 9-4), with a collection of South Sea implements, Chinese and Japanese articles, French and Flemish laces and fans, and admirable specimens of the basket-work of the California Indians. Near the *Music Stand*, where a military band plays on Sun. and holiday afternoons in fine weather, is the *Museum of the Academy of Sciences* (p. 510). Good views of the Golden Gate and of the surf rolling in on the ocean-beach are obtained from *Strawberry Hill* (426 ft.), the most conspicuous point in the Park. This is crowned by a picturesque Observatory. At the foot of the hill lies the *Stow Lake*, fed through the *Huntington Fall*. Both are artificial, the lake occupying a basin considerably higher than the general level of the park. Many varieties of water-fowl may be seen here. Boats may be hired on the N. side of the lake. Near

Strawberry Hill (p. 515), on a lower eminence, rises 'Prayer-Book Cross', commemorating the landing in the bay of Sir Francis Drake and the first Church of England service on this shore. In the W. part of the park is an excellent *'Speed Road'*. — *Hill Park*, now *Buena Vista Park* (Pl. C, 5, 6), $^1/_2$ M. from the E. end of Golden Gate Park, commands fine views (highest point 570 ft.).

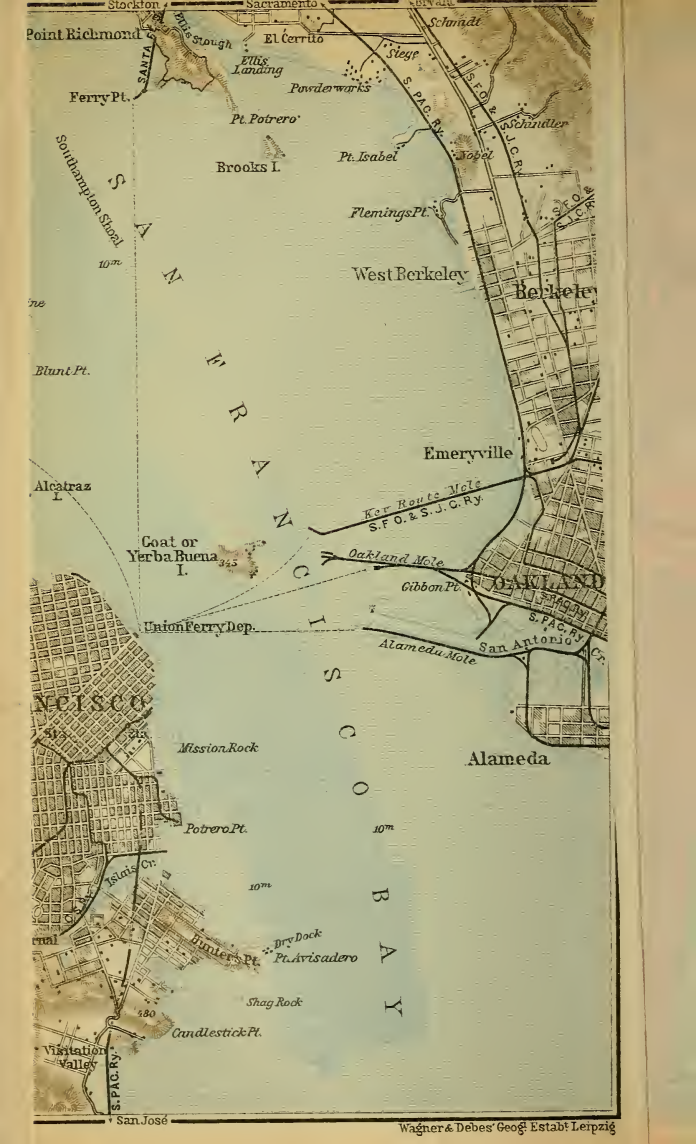
Near the N.E. corner of Golden Gate Park (p. 515) is a group of cemeteries (no longer used for burials), the largest of which is the ***Laurel Hill Cemetery** (Pl. B, 3), containing many fine monuments. The adjoining *Calvary Cemetery* (Pl. C, 4), formerly *Lone Mountain* (468 ft.), the top of which is marked by a large wooden cross, commands a splendid *View of the city, the Ocean, San Francisco Bay, the Golden Gate, Mt. Tamalpais, and Mt. Diablo. The Yerba Buena (p. 511) grows on Lone Mt. — The Presidio (p. 514) lies a little to the N. of Laurel Hill Cemetery (see above).

Excursions from San Francisco.

Sutro Heights Park. Seal Rocks (Cliff House). — These points may be reached by driving viâ the Golden Gate Park or Geary St. (Point Lobos Avenue), by the 'Ellis St., Park, and Ocean' tramway (see below), skirting the S. side of Golden Gate Park, by the 'Sutter St.' tramway, or by the 'California and Cliff Line' from Presidio Ave. and California St. It is advisable to go one way and return another. The through-fare, incl. transfers, is 5 c.

The excursion to (6 M.) *Point Lobos*, with Sutro Heights and the Seal Rocks (Cliff House), is one of the most popular short excursions from San Francisco. The 'Cliff' cars of the Sutter St. line skirt the rocks overhanging the *Golden Gate* (p. 511), of which it affords a magnificent *View, and ends near the entrance to ***Sutro Heights Park**, the beautifully laid-out grounds of the late Mr. Adolph Sutro (freely open to the public). The fine trees and plants here grow luxuriantly on the originally sandy but now well-watered site. The statuary could be dispensed with. Fine *View from the terrace over the Pacific Ocean, with the *Farralone Islands*, 30 M. to the W. (lighthouse). At our feet lies the *Cliff House*, a famous hotel and restaurant, destroyed by fire in 1907 and now being rebuilt. A great attraction here is the view of the ***Seal Rocks**, a stone's throw from the land, where huge sea-lions (Span. *lobos marinos*) bask in the sun. Some of the animals are 12-15 ft. long and weigh from 1000 lbs. upwards; and their evolutions in the water are very interesting. Their singular barking is easily audible amid the roar of the breakers. Near by are the huge and magnificent **Sutro Public Baths*, with salt-water swimming pools (bath 45 c.), an aquarium, restaurants, and a theatre. — The station of the 'Ellis St., Park, and Ocean' tramway (see above) lies on the beach, a little to the S. of the Cliff House. Drivers who have come by Geary St. or Golden Gate Park may vary the route, in returning, by following the Ocean Boulevard for about 3 M. and then turning into Ocean Ave. To the right, near the beginning of the latter, lies *Merced Lake*.

Cazadero
San Rafael
Red Rock
Mt. Tamalpais
Corte Madera
San Clemente
California Pt.
Mill Valley
Muir Woods
Tiburon Peninsula
El Campo
Pt. Chauncey
California City
Bluff Pt.
Hillarita
Richardson Bay
Belvedere
Raccoon Str.
Tiburon
Strawberry Pt.
Saddle Rock
Alameda Pt.
Angel I.
Sausalito Pt.
Sausalito
Marin Peninsula
Yellow Bluff
Rodeo Lagoon
Rodeo Cove
Horseshoe Bay
Lime Pt.
Four Fathom Bank
Bonita Cove
Pt. Diablo
Pt. Bonita
GOLDEN GATE
Presidio Shoal
Fort Pt.
Black Pt.
PACIFIC OCEAN
South Bay
Presidio
Mile Rocks
Pt. Lobos
Seal Rocks
Cliff Ho.
Sutro Heights
Golden Gate Park
Blue Mt.
Almshouse
San Miguel Hills
Sunnyside
Ocean Ho.
Ocean Beach
Ingleside
Lakeview
Merced Lagoon
Ocean View
Spring Valley
Union Pk.
San Bruno Mt.
1 : 75.000
Miles
Kilom.
Santa Cruz
San José
Colma


Stockton
Sacramento
Point Richmond
Ellis Slough
El Cerrito
Schmidt
Steyr
SANTA
Ellis Landing
Powder works
S. PAC. Ry.
S.F.O. & S.J.C.R.
Ferry Pt.
Pt. Potrero
Schandler
Southampton Shoal
Brooks I.
Pt. Isabel
Bopel
SAN FRANCISCO BAY
Flemings Pt.
10m.
West Berkeley
Berkeley
Blunt Pt.
Emeryville
Alcatraz I.
Ker Route Mole
S.F.O. & S.J.C.Ry.
Goat or Yerba Buena I.
325
Oakland Mole
Gibbon Pt.
OAKLAND
Union Ferry Dep.
S. PAC. Ry.
Alameda Mole
San Antonio Cr.
Mission Rock
Alameda
Potrero Pt.
10m
Islais Cr.
10m
Hunters Pt.
Dry Dock
Pt. Avisadero
Shag Rock
180
Candlestick Pt.
Visitation Valley
S. PAC. Ry.
San José
Wagner & Debes' Geogl Estabt Leipzig

Among the short drives or trips by electric car from San Francisco may be mentioned that to **San Bruno Mt.** (1315 ft.), 6 M. to the S. (2 M. from *Baden*, p. 521), a good point of view. Electric cars may also be taken (at the corner of Market and 5th Sts.) to (20 M.) *Burlingame* (p. 521) and (22 M.) *San Mateo* (p. 521). — A drive along the water-front gives some idea of the commercial activity of San Francisco and may include visits to the large *Union Iron Works* (Pl. H, 6; by permission obtained at city-office) at *Potrero Point* (also accessible by electric car), where ships of war are built, and to the *Dry Dock* at *Hunter's Point*.

The *Government Posts* in the Bay of San Francisco may be visited by the steamer 'General McDowell', which sails thrice daily from the foot of Washington St. (Pl. G, 2) to Alcatraz, Angel Island, Fort Mason (Black Point), and the Presidio (permits must be obtained at the Presidio). **Alcatraz Island** contains a military prison and a torpedo station. *Angel Island* serves as the Quarantine Station. *Yerba Buena*, known popularly as *Goat Island*, is the naval training-station, and the 'Pensacola', an old man-of-war, is moored here as a school-ship. The *Presidio* and *Fort Mason* are described at p. 514. — The largest naval station near San Francisco is at **Mare Island**, reached viâ *Vallejo Junction* and *Vallejo* (see p. 518). The island is the headquarters of the *U. S. Pacific Naval Squadron* and of the *U. S. Marine Corps*, and contains a *Navy Yard*, with large dry docks and interesting machinery.

***San Francisco Bay**, a noble sheet of water 50 M. long and 10 M. wide, gives San Francisco one of the grandest harbours in the world and affords numerous charming excursions. The various FERRIES start from the foot of Market St. (Pl. G, 2).

(1). The ferry starting farthest to the N. plies to the N. across the Bay, affording a good view of the *Golden Gate* (left) and *Belvedere* (right; a hilly peninsula jutting into the bay from the N. shore, with many summer homes and a hotel), to (6 M.) **Sausalito** *(Hollyoaks)*, a pleasant little yachting, bathing, and fishing resort, with many scrub-oaks and a few laurels, eucalyptus-trees, and willows ('sausal'; the last once much more numerous). A very attractive *Walk, with good views of the Golden Gate, leads round the promontory viâ *Lime Point* to (4 M.) *Point Bonita*, the N. horn of the Golden Gate (lighthouse).

[From Sausalito the electric service of the NORTH-WESTERN PACIFIC R. R. runs to (5 M.) *Mill Valley*, a charming region, thick with villas and cottages, from which the winding *Mt. Tamalpais Scenic R. R.* (views to the left) ascends to (8¼ M.) the top of **Mt. Tamalpais** (2604 ft.; 2 hrs. from San Francisco; through-fare $ 1.15, return $ 1.90). The railway terminates at the *Tavern of Tamalpais* (R. $ 1), about 200 ft. below the summit. The *View from the top includes the Pacific Ocean, the Coast Range, the Sierra Nevada, the Santa Cruz Mts., the Contra Costa Hills (overtopped by Mt. Diablo), Mt. Hamilton, San Francisco, and San Francisco Bay. A trail has been cut from the railway to *Bolinas Ridge*, etc. A gravity car leaves the Tavern daily at 2 p.m. for the *Muir Woods* (a fine grove of redwoods) and *Mill Valley* (fare $ 1).

Sausalito is also the starting-point of a narrow gauge steam-railway of the same company, running N. to (81 M.) *Cazadero*. — 10 M. *San Anselmo*, the junction of a short line to *San Rafael* (see below); 22 M. *Camp Taylor;* 26 M. *Tocaloma;* 30 M. *Point Reyes*, a shooting and fishing preserve, at the head of *Tomales Bay*. Beyond (63 M.) *Occidental* (600 ft.) we pass through a fine redwood district. — 81 M. **Cazadero** (**Cazadero Hotel*, $ 2), a favourite sporting and summer resort in the midst of the redwoods. Stages run hence to the N. along the coast.]

(2). The second ferry plies to (6 M.) **Tiburon**, the starting-point of the railway to *San Rafael*, *Petaluma*, and *Sherwood* (see below).

[From Tiburon to Sherwood, 145 M., *North-Western Pacific Railroad*, in 7 hrs. — 9 M. **San Rafael** (generally pron. 'San Rafél'; **Hotel Rafael*, from $ 3; *Jordan*, $ 1½; many small hotels and boarding-houses), a charming little resort, affording a pleasant and balmy relief from the dusty winds of San Francisco, should be visited by every tourist, especially in the time

of roses. It may also be reached from Sausalito by (12 M.) electric train. — From (17 M.) *Ignacio* a branch-line runs to (39 M.) *Boyes Hot Springs* and (43 M.) *Glen Ellen*. 31 M. *Petaluma* (American Hotel, $ 2-2½), with 3871 inhab. and a thriving trade in poultry, grain, and fruit, is the junction of a branch-line to (5 M.) *Donahue*. At (46 M.) *Santa Rosa* (Lebanon, $ 2½), the home of Mr. Luther Burbank, the horticulturist, an omnibus meets trains for (2½ M.; fare 50 c.) *White Sulphur Springs*. 51 M. *Fulton*, the junction of a branch-line to *Guerneville* and *Camp Vacation* (18 M.); 52 M. *Mark West*, with sulphur springs; 60 M. *Healdsburg*. From (68 M.) *Geyserville* stages run to (9 M.) *Skaggs' Springs*, with a number of warm sulphur springs. — From (78 M.) *Cloverdale* (United States Hotel, $ 1½-2½) a stage-coach runs to (18 M.; fare $ 2) the *Geyser Springs (2000 ft.; *Hotel*, $ 2½), a number of boiling springs in the *Devil's Canyon*, near the *Pluton River*. These springs vary greatly in temperature, appearance, and character, but there are no true geysers among them (comp. p. 448). The accepted theory ascribes them to chemical action. A guide is procured at the hotel to point out and name the most interesting features. The Geyser Springs may also be reached from Calistoga (see below). — Beyond Cloverdale the line continues to run towards the N., with the *Russian River* at some distance to the right. From (92 M.) *Hopland* stages ply to various points in the picturesque *Clear Lake District* (numerous mineral springs). 106 M. *Ukiah*, the starting-point of stage-lines to numerous mineral springs in the surrounding district. 132 M. *Willits* (Hotel Willits, $ 2-3). — It is proposed to extend the line from (145 M.) *Sherwood* (Sherwood Inn, $ 1½), the present terminus, to *Eureka*, on *Humboldt Bay*. Stages now cover the gap between Sherwood and *Camp 5*, to which point the railway has been built from Eureka towards the S. (42 M.).]

(3). The third ferry is that of the *Santa Fé Railway*, which runs to (7½ M.) *Ferry Point* (p. 485) in connection with the trains of the Santa Fé System.

(4). The 'Key Route' ferry of the *San Francisco, Oakland, & San José Electric Railway* runs every 20 min. to the 'Key Route' mole, where trains are taken for *Oakland* and *Berkeley*.

(5). The fifth ferry is that to *Oakland*, already mentioned at p. 466. This is the route for the Southern Pacific lines to the N., S., and E.

(6). Another line plies to (4 M.) *Alameda Mole*, whence the Southern Pacific Railway runs to (6 M.) **Alameda** (*Park Hotel*, R. from $ 1), a pleasant suburban town (16,464 inhab.), adjoining Oakland on the S., with attractive gardens and well-kept streets.

From San Francisco to Calistoga, 73 M., *Southern Pacific Railway* in 3¼-3½ hrs. — From San Francisco to (29 M.) *Vallejo Junction*, see p. 466. We then cross the strait by steamer to (31 M.) *South Vallejo*. 32 M. *North Vallejo* ('Vallayho'), a small town of 7965 inhab., opposite *Mare Island* (p. 517). The train now runs to the N. through the fertile *Napa Valley*, which is especially rich in grapes and other fruits. — From (38 M.) *Napa Junction* branch-lines run to (13 M.) *Suisun* (p. 465), and to *Sonoma* (p. 519), *Glen Ellen*, and *Santa Rosa* (see above). — From (46 M.) *Napa* (hotel, $ 2), a busy little city of 4036 inhab., with the large State Hospital, we may drive to the (6 M.) *Napa Soda Springs*. — Beyond (55 M.) *Yountville* we traverse extensive vineyards. 64 M. *St. Helena*, with many fine vineyards, is the starting-point of stages to *White Sulphur Springs* (2 M.; 25 c.), *Ætna Springs* (16 M.; stage daily in 3 hrs.; fare $ 1½), and *Angevin*, on *Howell Mountain*, a plateau of pine and balsam firs, famous for curative results in throat and lung maladies. — 73 M. Calistoga (*Calistoga*, $ 2½-5), the terminus of the railway, is a pretty little town of 1200 inhab., with several warm mineral springs. About 5 M. to the W. is the curious *Petrified Forest*, a tract 4 M. long and 1 M. wide, over which are scattered the remains of about 100 petrified trees. — About 12 M. to the N.W. of Calistoga rises Mt. St. Helena (4345 ft.), an extinct volcano, which may be ascended on horseback and affords an extensive view. Near by is R. L. Stevenson's 'Silverado'. From Calistoga stage-coaches run daily to (27 M.; $ 2.30) the *Geyser Springs* (see above) and to points in *Clear Lake District* (see above.)

Cazadero
Sta. Rosa
Calistoga
Rumsey
Tehama
Grafton
Tomales
Los Guilicos
St. Helena
Monticello
Madison
Penn Grove
Glen Ellen
Yountville
Petaluma
Blue Mt. 3000
Winters
Woodland
Pt. Reyes Ridge
Point Reyes
Sonoma
Napa Soda Springs
Lakeville
Napa
Davis
Dixon
Tocaloma
Vacaville
Sacramen
Sutterville
S. Pablo
Fairfield
Elmira
S. Rafael
Vallejo
Suisun
Maine Prairie
Clarksburg
Tamalpais
Benicia
Elk Grove
Port Costa
Suisun B.
Courtland
Golden Gate
Richmond
Martinez
Rio Vista
Berkeley
Concord
Arno
S. FRANCISCO
Oakland
Cornwall
Galt
Clayton
Antioch
Bracks
Alameda
3850 Mt. Diablo
Woodbridge
S. Leandro
Lodi
Millbrae
S. Ramon
Brentwood
S. Lorenzo
S. Mateo
Byron
Mt. Eden
Byron Hot Springs
Belmont
Alvarado
Stockton
Redwood
Pleasanton
Niles
Altamont
Purisima
Livermore
Peters
Menlo Park
Centerv.
Sunol
Collegeville
Palo Alto
Mission
Tracy
Lathrop
Mayfield
S. José
Aiviso
Pescadero
Black Mt. 2800
Mountain View
Milpitas
Cupertino
Vernalis
Sa. Clara
San José
Mt. Day
Tesla
Campbell
Hillsdale
Oakdale
Boulder Creek
Red Mt. 2817
Los Gatos
Mt. Hamilton
Modesto
Swanton
Alma
Westley
Folger
Wrights
Almaden
Felton
Keyes
Davenport
Mt. Bache 3790
Big Trees
Loma Prieta
Madrone
Byersville
Santa Cruz
Soquel
Aptos
Vernon
Gilroy Hot Springs
Monterey Bay
Watsonville
Gilroy
Carnadero
Livingston
Pajaro
Bell's Station
Ingomar
Castroville
S. Juan
Merced
Pt. Pinos
Pacific Grove
Gavilan Pk.
Hollister
Los Baños
Monterey
Natividad
Del Monte
Salinas
Tres Pinos
Athlone
Lake Majella
Chualar
Dos Palos
Mulberry
Minturn
Emmett
Gonzales
Los Angeles
Fresno, Los Angele
Wagner & Debes Geog. Estab. Leipzig.
Statute Miles 1 : 1.700.000 Kilometres

From San Francisco to Mount Diablo. — We proceed by ferry and train to (39 M.) *Avon*, as described at p. 529, and there take the *San Ramon* branch-line (S. P. R.) to (13 M.) *Walnut Creek*. Here horses and carriages can be hired for (7 M.) the summit of the mountain, of which two-thirds may be done by carriage, the remainder on horseback or on foot. Mt. Diablo (3850 ft.), a conspicuous object for many miles round and well seen from San Francisco (28 M. distant as the crow flies), commands a very extensive *View, including the valleys of the Sacramento to the N. and the San Joaquin to the S., the Sierra Nevada from Lassen's Peak on the N. to Mt. Whitney on the S., the Coast Range, and San Francisco. The ascent may also be made from *San Ramon*.

Sonoma (*Union, City*, $1^1/_2$-2), a city of 652 inhab., in the *Sonoma Valley*, to the N. of *San Pablo Bay*, is interesting as one of the chief seats of the Californian vine-culture. The wine is kept in tunnels excavated in the hills of volcanic sandstone. Sonoma is reached by railway (37 M.) from *Tiburon* (p. 517) or from (15 M.) *Napa Junction* (p. 518).

Californian Wines (communicated). Wine-making in California dates from 1775, the cuttings of a European grape having been brought to California by the Franciscan Fathers, who migrated thither from Mexico in 1769. They planted these vines around their Missions and made wine for their own use.

It was not, however, till after 1860 that wine-making began on a commercial scale. In 1861 a Viticultural Commission was appointed by the State of California, one member of which, Mr. Agoston Haraszthy, was despatched to Europe to examine into and report upon wine-growing and wine-making as carried on in the older wine-making countries, and their adaptability to the climate and the soil of California. On his return from Europe the Commissioner brought with him about 200,000 cuttings and rooted vines of every attainable variety to be found in Europe, Asia Minor, Persia, and Egypt.

Systematic planting was then pursued in the districts most adapted to each variety. Thus the wines of the Medoc, Burgundy, Sauterne, Rhine, and Moselle types were successfully produced in the region contiguous to the coast and surrounding the Bay of San Francisco, where the influence of the sea-fogs so tempers the climate as to produce ideal conditions for the development of the requisite proportions of sugar and acid in the grapes to bring about advantageous fermentation of dry wines. The wines of Napa and Sonoma Counties are analogous to the French, Italian, and German dry red and white wines; in Alameda County is found a situation eminently suitable to the production of wines of the Sauterne type; while in San Joaquin, Sacramento, and Yolo Counties dry wines closely resembling those of Algeria are produced.

In the interior valleys of the Sacramento and San Joaquin Rivers, and in the S. part of the State, in the vicinity of Los Angeles, ideal surroundings were found to exist for the making of sweet wines after the types of those produced in Spain, Portugal, and Madeira. Port, sherry, malaga, madeira, and tokay are all produced here on a very large scale. — In all about 125 of the best European wine-grape stocks are now cultivated in California in the localities best suited to them.

In 1894 the large wine makers and dealers combined their resources and skill under an organization called the Californian Wine Association, with a capital stock of $ 10,000,000. This organization, having the confidence of bankers and business men, was enabled to bring about a very great improvement in the production, handling, and marketing of Californian wines, which, besides a domestic consumption, have now a large export demand. Many gold and silver medals have been awarded to Californian wines at International Exhibitions, including those at Bordeaux (1895), Paris (1900), and Milan (1906).

The production of wine and brandy in the State rose from 5,000,000 gallons in 1878 to 30,000,000 gallons in 1898 and to 41,000,000 gallons in 1907. Of this total about three-fifths are dry wines, nearly two-fifths sweet wines, and the balance (1,500,000 gallons) brandy.

The total area in vines in the State is 250,000 acres, of which about one-half is devoted exclusively to wine-making, about 100,000 acres to raisins and brandy-making purposes, and about 25,000 acres to grapes for table-use. The total investment in the grape-growing industry of California, including vineyards and establishments for wine-growing and storage, grape-drying, and shipping, is estimated to exceed $ 100,000,000.

81. From San Francisco to Santa Cruz.

Comp. Map, p. 519.

a. Viâ Oakland.

82 M. Ferry to (8 M.) *Oakland;* Southern Pacific Railway thence to (48 M.) *San José* (fare $ 1.25; return-fare, Sat. to Sun., $ 1.75) and to (82 M.) *Santa Cruz* ($ 2.80). This excursion, which should not be omitted by any visitor to San Francisco, may be made by holders of through-tickets between Los Angeles and San Francisco, in either direction (see R. 82).

From *San Francisco* to (4 M.) *Alameda Mole* and (7 M.) *Oakland*, see p. 466. The line skirts the E. shore of *San Francisco Bay* (views to the right). 11 M. *Fruitvale;* 26 M. *Alvarado;* 31 M. *Newark.* At (40 M.) *Alviso* we reach the smiling *Santa Clara Valley* (p. 522). 45 M. *Santa Clara* (p. 523). — 48 M. **San José**, see p. 523.

The most picturesque part of the line soon begins now, as it ascends over the *Santa Cruz Mts.* (views). 57 M. *Los Gatos* ('The Cats'; 400 ft.), a pretty little town on the E. slope of the mountains, lies in the warm belt and grows oranges successfully. Farther on we ascend through a canyon with fine rock-scenery and towering redwood trees. 60 M. *Alma* (560 ft.); 63 M. *Eva.* From (64 M.) *Wrights* (900 ft.) we descend rapidly, through similar scenery, towards the coast. — 73 M. *Felton* (275 ft.).

From *Felton* a branch-line runs to (4 M.) *Ben Lomond* (Ben Lomond Hotel, from $ 2½), a summer-resort, (6 M.) *Brookdale*, and (8 M.) *Boulder Creek.*

76 M. *Big Trees* (270 ft.), the station for the famous ***Big Trees of Santa Cruz.**

This grove (adm. 25 c.) contains about a score of the genuine *Redwood* (*Sequoia sempervirens;* comp. p. 549) with a diameter of 10 ft. and upwards. The largest is 23 ft. across; one of the finest, named the *Giant*, has a circumference of 70 ft. A large hollow tree is shown in which Gen. Fremont camped for several days in 1847. Another stump is covered with a platform, which holds 12-14 people.

78 M. *Rincon* (300 ft.).

82 M. **Santa Cruz** (*St. George*, in the town, from $ 3; *Pope Ho.*, for weekly boarders; *Sea Beach Ho.*, from $ 3, at the beach, 1 M. from the town, open all the year), a small city of 5659 inhab., originating in the *Mission de la Santa Cruz* (1791), is pleasantly situated at the N. end of the *Bay of Monterey* (p. 524) and is a favourite summer and winter resort. Its attractions include an excellent bathing-beach (with a casino, band-stands, a tent-city like that mentioned at p. 540, fresh-water lakes, and cold and hot water plunge baths), fine cliffs, good fishing, caves and recesses abounding in sea-anemones, beautiful flower-gardens, and picturesque surroundings. The slow freight-boats, carrying a few passengers up and down the coast, put in here. A grand

drive, affording splendid *Views of forest and mountain scenery, may be made to the (6 M.) *Big Trees* (p. 520), returning by the cliffs along the shore.

From Santa Cruz to *Pajaro*, see p. 524.

b. Viâ Ocean Shore Railway.

69 M. This new line was not yet wholly open for traffic when the Handbook went to press. RAILWAY from San Francisco to (30 M.) *Half Moon Bay* in 2 hrs. (fare 95 c.) and thence (1 hr.) to (38 M.) *Long Bridge;* STAGE COACHES hence to *Pescadero* and *Swanton;* RAILWAY from Swanton to (16 M.) *Santa Cruz* in 1 hr. (fare 65 c.).

San Francisco (present depot at cor. of 12th and Mission Sts.), see p. 509. This line hugs the coast closely, affording good views of the Coast Range to the left and of the ocean to the right. 7 M. *Palmetto;* 10 M. *Thornton;* 12 M. *Mussel Rock;* 13 M. *Edgemar;* 14 M. *Salada;* 15 M. *Brighton Beach;* 16 M. *Calera;* 17 M. *Rockaway;* 18 M. *Tobin;* 19 M. *San Pedro Terrace;* 23 M. *Montara.* 23½ M. *Farallone* is the nearest point for a visit to the Farallone Islands (p. 516). 24 M. *Moss Beach;* 28 M. *Granada;* 30 M. *Half Moon Bay* (see above); 31 M. *Arleta Park;* 36 M. *Lobitos;* 38 M. *Long Bridge* (see above). — 63 M. *Swanton* (see above); 69 M. *Santa Cruz*, see p. 520.

82. From San Francisco to Los Angeles.

Comp. Maps, pp. 516, 519, 535.

a. Viâ Coast Line.

475 M. SOUTHERN PACIFIC RAILWAY in 14¾ hrs. (fare $ 14; sleeper $ 2.50). Unlimited tickets ($ 16.75) are also available by the line to San José viâ Oakland (R. 81), allowing a stoppage at Santa Cruz (p. 520), whence we rejoin the main coast-line at Pajaro (p. 524). For stop-over at the Del Monte Hotel, see p. 524.

San Francisco, see p. 509. The train starts from the Southern Pacific Railway Station (p. 509) and at first runs through a series of short tunnels, from which it emerges at (9 M.) *South San Francisco. San Francisco Bay*, which we skirt for 30 M., comes into view on the left. 12 M. *Baden;* 15 M. *San Bruno;* 17 M. *Millbrae*, with the large country-house of Mr. D. O. Mills (right). — 20 M. *Burlingame*, a fashionable residence suburb. — 22 M. *San Mateo* (Peninsula, from $ 3; Pierchon, Wisman, from $ 2½), a pleasant little town, embosomed in live-oaks, is the starting-point of a daily stage-line to (33 M.) *Pescadero* (through-fare $ 3.10).

The road to Pescadero crosses the *Sierra Morena* (views), passing the interesting old village of *Spanishtown.* — Pescadero (*Swanton Ho.*, $ 2), a small village on the Pacific coast, at the mouth of *Pescadero Valley*, is famous for its *Pebble Beach*, on which agates, opals, jaspers, and other similar stones are found.

26 M. *Belmont.* — 29 M. *Redwood* (Tremont, $ 1½), so named from the trees (see p. 520) in the timber of which it does its principal trade. A good road runs hence across the Sierra Morena to

San Gregorio, traversing a splendid redwood forest (*Views). There is also a stage from Redwood daily to (31 M.) Pescadero (p. 521; through-fare from San Francisco, $ 3.05).

33M. **Menlo Park** (*Menlo Park Hotel, Oak Grove Villa*, from $ 2) is another favourite residence of the wealthy merchants of San Francisco and contains many fine houses, surrounded by beautifully laid out grounds and noble trees. Beyond Menlo Park the red roofs of the Stanford University (see below) may be seen to the right. — 34 M. *Palo Alto* (Palo Alto Hotel, $ 2), taking its name ('tall tree') from a great redwood to the left of the railway, is the nearest station to the (1 M.) *University*.

*Leland Stanford Jr. University, founded by Mr. and Mrs. Leland Stanford in memory of their only son and endowed by them with upwards of $ 30,000,000 (6,000,000*l.*), was opened in 1891 and has now a staff of about 130 instructors and an attendance of 1500 students, of whom 500 are women. It is finely situated on the former Palo Alto stock-farm (a tract of 8400 acres, deeded to the University), on a plain near the foot of the coast mountains. The buildings were mainly designed by *H. H. Richardson*, who took the *motif* of their architecture from the cloisters of the San Antonio Mission (p. 525). The material is buff, rough-faced sandstone, surmounted by red-tiled roofs, producing brilliant effects of colour in conjunction with the live-oak, white oak, and eucalyptus trees outside, the tropical plants in the quadrangle, and the blue sky overhead. In the earthquake of 1906 the buildings suffered severely, the damage done being estimated at nearly $ 2,000,000. Much, however, has been restored or rebuilt. The buildings include a low quadrangle, enclosing a court 586 ft. long and 246 ft. wide, with a beautiful colonnade on the inner side; an outer, two-storied quadrangle, with cloisters on the outside; a chapel; various dormitories; an art museum; a mechanical department; and a little village of professors' houses. Visitors may procure meals at the *University Inn*. — Near the University were the celebrated *Palo Alto Stables and Paddocks* (Mr. Stanford's), which are now closed, all the stock having been sold. Among the most famous horses bred at this stud was *Suñol*, who trotted a mile in 2 min. 7½ sec., and whose grave is shown.

40 M. *Mountain View* is the nearest station to (6 M.) *Cupertino* where one of the finest red wines in California is produced *(Las Palmas)*. This vineyard has of late years suffered greatly, as have many in this valley, from the phylloxera, but the replanting of 'resistant stock' has redeemed it. — The railway now follows the **Santa Clara Valley*, one of the fairest and most fertile valleys in California, sheltered on either hand by mountains. Large quantities of fruit (especially grapes, prunes, and peaches) and hay are grown here. Excellent wine is also made. At *Agnews*, as we approach Santa Clara, a large *Insane Asylum* is seen to the left.

48 M. **Santa Clara** (70 ft.; *Santa Clara*, $ 1½), a pretty little town with 3650 inhab., is the seat of *Santa Clara College*, a large institution founded by the Jesuits in 1851 (150-200 students). Its church, belonging to the old mission of 1777, is one of the best preserved in the state. The town has become an important shipping centre for fruit. Santa Clara is connected with (3½ M.) San José (p. 523) by the **Alameda*, a fine avenue traversed by an electric tramway (fare 10 c.). It is well worth while; especially in the rose season, to leave the train at Santa Clara and drive (carr. or tramway) through the Alameda to San José.

51 M. **San José** ('Hosay'; 90 ft.; **Hotel Vendome*, with pleasant grounds and sun-parlour, $ 3-4; *New St. James*, from $ 2½, R. from $ 1), a beautiful city of 21,500 inhab., is of importance as the chief place in the fruitful Santa Clara valley (p. 522) and is also frequented on account of its delightful climate. The dome of the fine *Court House* affords an extensive *View, including the Calaveras Mts. (with Mt. Hamilton) to the E., the Santa Cruz Mts. to the S., the Contra Costa Mts. to the W., and San Francisco Bay to the N. The *City Hall*, *Post Office*, and *Public Library* are important buildings. San José also contains several good schools and colleges.

San José is the starting-point for (26 M.) *Lick Observatory*, on Mt. Hamilton. Stages start daily (except Sun.) at 7.30 a.m. and reach the Observatory about 1.30 p.m., halting 1 hr., and regaining San José at 6 p.m. (return fare $ 4, from San Francisco $ 6.50). On Sat., when visitors are allowed to look through the great telescope between 7 and 10 p.m., the stage starts at 12.30 p.m. and returns about midnight (return-fare $ 5, from San Francisco $ 7.50). Parties of four or more should hire a private carriage. The road, though uphill nearly all the way, is so well made and easily graded that a fair rate of speed is maintained, while the beautiful and ever-varying views prevent weariness. Innumerable wild-flowers line the way, while the manzanita, live-oaks, and other trees are also interesting. The Observatory is in sight most of the time. We cross two intervening ridges. About 7 M. from San José we pass near the mouth of the *Penitencia Canyon* (so called because the monks of the San José Mission kept their retreats here), which has been reserved as a city-park, called the *Alum Rock Canyon Park* (1000 acres), containing 16 mineral springs, public baths, a restaurant, a deer paddock, a bear den, and an aviary (hotel; electric car from San José). On crossing the second of the intervening ridges, we descend into *Smith Creek* (2145 ft.), where a halt is generally made for dinner (50 c.) at the *Santa Ysabel Hotel* (good food and beds). The hotel lies at the base of Mt. Hamilton, 2 M. from the Observatory in a direct line (footpath), but 7 M. by the road, which is said to make 365 bends. Visitors sometimes spend Sat. night here and return to San José on Sun. morning. — The *Lick Observatory, founded with a legacy of $ 700,000 (140,000 *l.*) left by *Mr. James Lick* (1798-1876) of San Francisco (comp. p. 513), stands on the summit of *Mt. Hamilton* (4444 ft.), and is in point of situation, equipment, and achievement one of the leading observatories of the world. It forms the astronomical department of the University of California (p. 466). The *Great Telescope* is one of the largest and most powerful refracting telescopes in existence; its object-glass, 36 inches in diameter, was made by Alvan Clark of Cambridge (p. 273). Mr. Lick is buried in the foundation-pier of the telescope. Visitors are received courteously at the Observatory and shown all the objects of interest (10-4, Sat. 7-10 in the evening; no admission on Sun.), but there is no inn or restaurant nearer than Smith Creek. The **View from the Observatory is very extensive, sometimes including wonderful effects of cloud and mist. It embraces, on a clear day, the Sierra Nevada, the Pacific Ocean, Santa Clara Valley, Angel Island (p. 517), San Bruno Mt., and Mt. Tamalpais (p. 517). Loma Prieta (p. 524) is conspicuous to the S. Comp. 'Handbook of the Lick Observatory', by *E. S. Holden.*

About 12 M. to the S. of San José, in a spur of the coast-range, are the interesting *New Almaden Quicksilver Mines*, which may be reached by railway (fare 35 c.). — An excursion may be made (by electric car) to the *Pacific Congress Springs* (700 ft.), 12 M. to the S.W., which are beneficial in rheumatism. The return may be made along the foot-hills by way of (6 M.) *Los Gatos* (p. 520).

San José is also a station on the Oakland line to Santa Cruz (comp. p. 520).

Beyond San José the Lick Observatory (see above), on the top of *Mt. Hamilton*, is seen to the left. 56 M. *Hillsdale* (150 ft.);

69 M. *Madrone* (340 ft.), 6 M. to the W. of the *Madrone Springs*. — 81 M. *Gilroy* (190 ft.; Southern Pacific Hotel, $2), a busy little city of 1820 inhab., 13 M. to the W. of the frequented *Gilroy Hot Springs* (Hotel, $ 2½; stage daily in 2½ hrs.). From Gilroy a branch-line leads to the S. to (95 M.) *Hollister* and (101 M.) *Tres Pinos*, a centre of the grain and cattle trade. — Our line bends to the W. and runs towards the coast. 100 M. *Pajaro* ('Páharo'; otherwise known as East Watsonville), the junction of the line to *Santa Cruz*.

From Pajaro to Santa Cruz, 21 M., railway in 1 hr. — This line runs to the N.W., with the pointed *Loma Prieta* ('Black Mt.; 3790 ft.), one of the loftiest of the Santa Cruz Mts., rising to the right. 2 M. *Watsonville*, a centre of the fruit trade in this district. 13 M. *Aptos* and (16 M.) *Capitola* are two resorts on Monterey Bay. 20 M. *Santa Cruz Beach*. — 21 M. Santa Cruz, see p. 520.

Beyond Pajaro our line runs to the S.W. through a valley shut in by ravined hills to (110 M.) *Castroville*, the junction of the branch-line to *Monterey*, the *Hotel del Monte*, and *Pacific Grove*.

From Castroville to Monterey and Pacific Grove, 17 M., railway in ¾ hr. Through unlimited tickets between San Francisco and Los Angeles (see p. 521) allow a stop-over at Del Monte on payment of the return-fare (90 c.) between Castroville and Del Monte. A special ticket (price $ 22) covers the journey from San Francisco to Los Angeles, the détour to Del Monte, and two days board at the hotel. Week-end return-tickets from San Francisco to Del Monte, including hotel board, are also sold for $ 10. — This branch-line leaves the orchards and meadows through which we have been journeying, runs between the sand-dunes and chaparral that fringe the shore of Monterey Bay, and crosses the *Salinas River* near its mouth. 14 M. *Del Monte*, see below; 15 M. *Monterey*, see below. — 17 M. Pacific Grove (*Pacific Grove Hotel*, from $ 2, under the same management as the Del Monte), a seaside resort also connected with Monterey and Del Monte by an electric tramway skirting the coast. The Marine Biological Laboratories of both the University of California (p. 466) and of Stanford University (p. 522) are situated at Pacific Grove.

Monterey (*The Monterey*, R. from $ 1), situated on the S. side of the bay of that name, 85 M. from San Francisco by sea, contains 1748 inhab., largely of Spanish blood, and is one of the quaintest of Californian towns, its atmosphere still drowsy with the Spanish-Mexican spirit of '*pocotiempo*'. Its site was visited by the Spaniards in 1602, but it was not until 1770 that the *Mission de San Carlos de Monterey* was founded on this spot. Monterey was the capital of California before and for a while after its conquest by the Americans in 1846, but with the removal of the seat of government went the commercial importance and life of the little town. It is, however, extensively visited on account of its balmy climate (warm in winter and cool in summer; mean temp. of Jan. ca. 50°, of June, July, and Aug. 60-64°), its beautiful sandy beach, and its charming surroundings. Many of its buildings are of adobé. Some remains of the old Spanish fort still remain, while the Roman Catholic church occupies the site of the Mission, which was removed to Carmelo Valley (see p. 525) in 1771. The historic *Custom House* of Spanish and early American rule is well preserved. The house in which Robert Louis Stevenson lived in 1878 is pointed out. *Colton Hall* was the first capitol of California.

The *Hotel del Monte ('Hotel of the Forest'), ⅓ M. from the above mentioned station and one of the most comfortable, best-kept, and most attractive hotels in America, lies in the midst of exquisite *Grounds, in some ways recalling the fine country parks of England, though, of course, the vegetation is very different. Among the noble old trees which surround it are innumerable live-oaks and Monterey pines and cypresses, while the **Gardens* offer a continual feast of colour. One section of the ardens, known as 'Arizona', is devoted to cacti of all kinds, and in

another part of the grounds is a *Maze* of cypress hedges. A little to the N. of the hotel is the pretty little boating-lake named the *Laguna del Rey*, while on the beach, 1/2 M. from the hotel, is a large *Bathing House*, including four swimming-basins and hot water tanks. Nearly opposite the hotel is the *Hotel del Monte Club House;* tennis courts and croquet lawns are scattered among the trees, and near by are *Golf Links*.

The chief excursion from the hotel is the so-called **Seventeen Mile Drive, leading round the peninsula on which Monterey lies. As we leave the town, going towards the W., we see, on the hill to the left, a *Statue of Padre Junipero Serra*, the founder of the Mission, erected in 1891. To the right is the *Bay of Monterey*, with its white sandy beach. On the left is a still unfinished shaft, its stones contributed by the counties and societies of California, to be surmounted by a statue of Commodore Sloat, who first raised the American flag on the Pacific coast, in 1846. We pass the *Presidio*, a U.S. army post and reservation to the left; on the beach beyond are the low gray huts of Chinese and Japanese fishermen. About 1 M. beyond *Pacific Grove* (p. 524) we pass near the lighthouse on *Point Pinos*, the S. headland of the Bay of Monterey, and turn to the left. The next part of the road lies mainly through trees, passing not far from the little *Lake Majella*. To the right is the *Moss Beach* (fine algæ, or sea-mosses). Farther on we have a fine unimpeded view of the Pacific Ocean, and about 7 M. from Monterey reach the **Seal Rocks*, where we enjoy a spectacle similar to that mentioned at p. 516. Another mile brings us to **Cypress Point*, with its flat, umbrella-like Monterey cypresses (*Cupressus macrocarpa*), a singular, crooked, misshapen tree indigenous to this locality. Beyond Cypress Point the road runs to the E., passing *Pebble Beach*, where agates, etc., may be picked up; *Chinese Cove*, with a small Chinese settlement; and the sandy *Pescadero Beach*. The road then turns to the left (N.), and a short digression may be made to the right, to visit the old *Carmelo Mission*, the burial-place of Junipero Serra (see above), where the original church has been supplied with a new roof. The remainder of the drive (5 M.) runs through woods.

A favourite outing is to drive to (17 M.) *Laurelles Ranch*, to the S., a comfortable annex of the Del Monte, and to stay there for a day or two (tariff as at the Del Monte). — Other pleasant drives are past the Carmelo Mission (see above) to (10 M.) *Point Lobos* and inland to (20 M.) *Salinas* (see below). — *Carmel-by-the-Sea* (Pine Inn, $2) is a charming little village on Carmel Bay, 3 M. to the S.W. of Monterey (omnibus 25 c.).

Good trout fishing is obtained in the *Carmelo River*. Fishing, also, in the bay, where 'glass-bottom' boats may be hired, with a Japanese diver. Deer and quail shooting may be enjoyed in the adjacent woods and mountains.

From Castroville the main line runs to the S.E. along the right bank of the Salinas river, through the wide, wooded valley of that name. — 118 M. *Salinas* (Barden Ho., from $2; Abbott Ho.), a place with nearly 5000 inhab. Here are some huge oil-supply tanks of the S.P.Ry. A stage runs from Salinas to (40 M.) *Tassajara Hot Springs* (1500 ft.), over an unusually attractive road. — At (144 M.) *Soledad* are the scanty ruins of a mission founded in 1791. A stage runs from here to (8 M.) *Paraiso Springs* (1400 ft.), in the Santa Lucia Mountains. About 14 M. to the N.E. of Soledad are the **Vancouver Pinnacles*, a picturesque and imposing group of rocky domes and monoliths. — 164 M. *King's City* is the point for the carriage-drive to (26 M.) *San Antonio Mission*, the beautifully situated ruins of one of the most famous of California Missions. Its preservation is now the care of the 'Landmarks Club' (p. 538). — At (208 M.) *San Miguel* the remains of the mission, founded in 1797, are visible from the train. — 217 M. **Paso Robles** (720 ft.; *El Paso de*

Robles Hotel, from $2½; *Alexander*, $1½-2) is situated in a vast natural park of live-oak, from which its name '*El Paso de Robles*' ('Pass of the Oaks') is derived. It is frequented for its hot sulphur springs (95-110° Fahr.) and its mud baths (140° Fahr.), which are efficacious in rheumatism, gout, and skin diseases. Among the many pleasant drives from Paso Robles is that to (6 M.) *Santa Ysabel Hot Springs* in the hills to the E. — From Paso Robles the train climbs gradually through a pass in the *Santa Lucia Mountains*, leaving the fertile and wooded Salinas Valley. Beyond (236 M.) *Santa Margarita* (995 ft.), at the head of the Salinas River, the line ascends in windings to its highest point (1340 ft.), 4 M. farther on. We then pass through seven tunnels and descend by a superb curve to (253 M.) **San Luis Obispo** (240 ft.; *St. James*, *French*, $2), a pleasant little town of about 3000 inhab., situated in a great grazing valley, broken by cone-shaped foot-hills. The mission, founded in 1772 and now disfigured by a poor modern steeple, has given its name to the town, once the centre of Spanish wealth in this valley. To the N. of the town is the *State Polytechnic School*.

From San Luis Obispo a stage runs daily to (7 M.) *San Luis Obispo Hot Sulphur Springs* (Hotel, from $2), frequented for their medicinal properties.

From San Luis Obispo a short branch-line runs to (10 M.) *Port Harford*, on the coast, whence regular slow-freight steamers, carrying a few passengers run N. to San Francisco and S. to San Diego.

Another branch-line runs inland from San Luis Obispo to (32 M.) *Santa Maria*, (54 M.) *Los Alamos*, and (66 M.) *Los Olivos*, whence a stage runs to *Gaviota* (see below).

Our train now runs through a flat grazing valley, with occasional glimpses of the sea between the sand-dunes. 263 M. *El Pizmo* (Hotel, $3-4), with a bathing-beach 20 M. long. — 277 M. *Guadalupe*, the northernmost town in the huge **Santa Barbara County**, which the train takes 3 hrs. to traverse. Its scenery is very picturesque, and its coast, facing due S., is protected by a background of mighty mountains and recalls the Riviera. The products of the district include hay, beans, walnuts, lemons, beet-sugar, olives, olive-oil, petroleum, poultry, and pigeons. — Beyond Guadalupe we cross the long narrow *Santa Maria Valley*, with the *San Rafael Sierra* to the E. From (303 M.) *Surf* onwards the sea is almost continuously in sight to the right for over 100 M. farther south.

From Surf a branch-line runs to (10 M.) *Lompoc*; in the *Santa Maria* oil district. The crude petroleum is conveyed through pipe-lines to (35 M.) the coast.

We pass *Point Concepcion*, with its lighthouse, and descend gradually through a rolling grazing land between the sea and the *Santa Ynez Mts.* to (340 M.) *Gaviota*, whence a stage runs daily (fare $2) to (24 M.) *Los Olivos* (see above), across the Santa Ynez Mts., affording a most delightful drive. At (356 M.) *Naples* we get a good view of the four long islands forming a chain bounding and protecting Santa Barbara channel. Our line turns inland through orchards of olives and other fruit.

371 M. **Santa Barbara** (**Potter*, a large hotel on the shore, from $3; *Arlington*, $2-4), a city of 6587 inhab., the 'American Mentone', is charmingly situated on the coast-plain, at the base of the foot-hills, with the *Santa Ynez Mts.*, a little farther off, forming a fine screen against the cold N. and W. winds. It has a well-deserved reputation as one of the most attractive winter-resorts in California, due to its mild, dry, and equable climate (mean temp., winter 50-55°, summer 65-70°), the beauty of its surroundings, the luxuriance of its roses and other flowers, the excellent bathing-beach (with a large bathing-pavilion), and its pleasant society. The main street, 2 M. long, is paved with asphalt and lined with substantial business blocks. Behind these, in side-streets, are traces of the Mexican and Spanish days, notably the low and wide adobé house, with verandas around its courtyard, of Governor de la Guerra. Most of the private houses are surrounded by delightful gardens. The chief lion of the place is the old **Mission*, founded by Padre Junipero Serra (p. 525) in 1786. It lies on a hill $^3/_4$ M. to the N. of the town, and may be reached by following the electric tramway which diverges to the right from Main St. at the Arlington Hotel. The end of the tramway-line is at the Mission, with its colonnaded front, red roof, and two-towered church.

Visitors are admitted daily 8-11.30 & 1-5, on Sun. 11-2.30 & 4-5 (admission to the inner garden by special permission only; small fee expected). The points shown include the plain whitewashed church (containing a few paintings), refectory, dormitory, and garden. About a dozen of the old Franciscan monks still remain. The Mission commands a splendid *View (best from the church-tower) of Santa Barbara and the Pacific, with the islands in the background. On the wall about 100 yds. behind the Mission is a sun-dial with the inscription: 'Lux dei vitæ viam monstrat sed umbra horam atque fidem docet'.

After visiting the Mission we may ascend the picturesque *Mission Canyon* behind it, crossing the ancient stone bridge and turning to the left (sign-post 'Up the Canyon'). The canyon contains some pretty waterfalls and one of the finest olive-groves in California. Near its entrance, we get a glimpse of *Miradero*, a sanitarium for nervous nvalids.

To the right, short of the bridge, is the steep approach to the (16 M.) **Mountain Drive*. The drive, which must be entered at this end, commands beautiful views and comes out near the foot of Hot Springs Ave., whence we may return viâ *Montecito*, situated in a pretty valley, 4 M. to the E. of Santa Barbara, with numerous beautiful gardens. The *Drive along the slope between these gardens is well worth making.

On a hill about 1 M. to the E. of Montecito (sign-boards), at the head of Hot Springs Avenue, are the *Hot Springs* (1900 ft.; temp. 114-118°), whence a climb of $^1/_4$ hr. brings us to *Point Look Out*, commanding a fine view. — The **San Ysidro Ranch* ($12-25 weekly), about 2 M. beyond Montecito and 2 M. from Miramar (p. 528), has good accommodation for tourists and fine orange and lemon groves. In the romantic *San Ysidro Canyon* are fine waterfalls.

On the W. side of Santa Barbara is the fine (12 M.) *Cliff Drive.* The road runs near the W. shore, passing around the *Dibblee Mansion* and grounds, situated on a height just outside the town (*View), continues as far as the lighthouse, and returns by way of *Hope Ranch* and *Lake.*

Another drive (3-4 hrs.), perhaps the finest of all, leaves Santa Barbara on the N.W. for the **San Marco Pass* (2225 ft.) leading to the *Santa Ynez Valley*, with two old missions. The road winds round the precipitous sides of the hills, which are clad with beautiful shrubs, and beyond the summit

of the pass descends rapidly amidst woods. Good luncheon is obtainable at *Cold Springs Mountain Resort* (well spoken of). — *La Piedra Pintada* ('painted rock'), an interesting relic of aboriginal art, is on the Santa Ynez Mts., near the San Marco Pass.

Among other noted points near Santa Barbara are *Sycamore Canyon* (2 M.), *Bartlett's Canyon* (10 M.), *Glen Annie* (13 M.), *Goleta* (8 M.), *Ortega Hill* (5 M.), *Crocker Ranch* (8 M.), *Hollister's Ranch* (12 M.), with a beautiful avenue of date-palms, and *Cooper's Ranch* (15 M.), with a large olive-grove. Near the town we may notice the Chinese vegetable gardens, the fields of Pampas grass (cultivated for its plumes), and the groves of walnut. Flowers grow here most luxuriantly; at a flower-show in Santa Barbara 160 varieties of roses were exhibited, all cut from one garden on the same morning. — The curious nest of the *Trapdoor Spider* is often found near Santa Barbara. — Travellers on the mountains should be careful to avoid the poison oak shrub, contact with which is apt to be troublesome.

Ocean Yachts make excursions, on a usually perfectly calm sea, to various points on the coast and to the islands of *Santa Cruz* (26 M.) and *Santa Rosa* (31 M.). The former is the larger of the two and is inhabited by a few farmers. The beautiful *Abalone* shells are found in great abundance on these islands. — In the bed of the ocean, about 10 M. to the S.E. of Santa Barbara and 1½ M. from shore, is a huge spring of petroleum, the oil from which may be seen floating on the surface in calm weather, one of many similar submarine oil-wells on this coast.

Steamers ply regularly from Santa Barbara to (280 M.) *San Francisco* (p. 509), *San Diego* (p. 538), *San Pedro* (p. 534), etc.

Beyond Santa Barbara our line passes through (373 M.) *Miramar* (Miramar Cottages, $ 15 a week) and *Montecito* (p. 527) to (377 M.) *Summerland*, where the presence of submarine oil-wells is evident. 382 M. *Carpinteria*, with a grape-vine covering a trellis 100 ft. square, having a trunk 8 ft. in circumference, and sometimes bearing 15-20,000 lbs. of grapes (several times more than the yield of the famous vine at Hampton Court). Here, and beyond, we run close to the sea, the mountains at places barely leaving room for the tracks (views to the right).

399 M. **Ventura**, the railroad name for *San Buenaventura* (50 ft.; *Rose*, from $ 2½; *Anacapa*, from $ 2), a city of 2460 inhab., pleasantly situated at the mouth of the valley of the *Ventura*, carries on a large trade in lima beans (a staple food along the coast) and other vegetables, fruits, nuts, sugar-beets, grain, and petroleum oil. It is also a health-resort. The well-preserved chapel of the Spanish Mission (founded 1782) dates from 1809 and is still in use.

A branch-line runs hence to the N. to (16 M.) *Nordhoff* (The Foothills, from $ 3; Ojai Inn, from $ 2), a mountain village in the beautiful *Ojai Valley ('Ohigh'), at a height of 700-1400 ft., surrounded by an amphitheatre of mountains, of which *Mt. Topotopo* (6350 ft.) is the chief. This valley is a favourite winter resort, having an exceptionally fine climate. It is full of live-oaks and other trees and is exceedingly rich in wild flowers.

404 M. *Montalvo* is the junction of the line to *Saugus*.

From Montalvo to Saugus, 45 M., railway in 1¾ hr. This line runs to the E. up the *Santa Clara Valley* (not to be confused with the valley of the same name farther to the N.; see p. 522). At (4 M.) *Saticoy* we lose sight of the sea. 12 M. *Santa Paula*, a busy little place, in the midst of truck-farms, small vineyards, and grazing fields. We cross the *Santa Clara River* near (29 M.) *Piru*, a pretty town among orange, lemon, and pepper trees, and oil-wells. At (31 M.) *Camulos*, on the right, is seen the home of 'Ramona', a typical Spanish ranch. — 40 M. *Castaic*. The mountains now

close in; on the N. are the foot-hills of the San Rafael Range, on the S. the higher peaks of the Sierra San Fernando. — 45 M. *Saugus*, the junction of the San Joaquin Valley line (see p. 531).

From Montalvo the coast-line runs to the S.E. to (408 M.) *Oxnard* (2000 inhab.), situated amid a fertile sugar-beet country and containing large sugar-factories. We now turn to the E. to (438 M.) *Santa Susana*, in a narrow valley between the Sierra San Fernando on the N. and the Sierra de Santa Monica on the S. About 4 M. farther on we enter a newly cut tunnel, 1½ M. long. At (446 M.) *Chatsworth Park*, the first town in Los Angeles County and the centre of a famed hay-district, are the vast quarries that supply the stone for the government breakwater at San Pedro (p. 534). Here the line reaches the Los Angeles River, crossing it at (457 M.) *Encino*, and runs, following its left bank, through a dry sandy valley to (465 M.) *Burbank*, on the San Joaquin Valley line (p. 531). Hence to —

475 M. **Los Angeles**, see p. 531.

b. Viâ the San Joaquin Valley.

484 M. Southern Pacific Railway in 15-21 hrs. (fare $ 14; sleeper $ 2.50).

From *San Francisco*, viâ *Oakland*, to (32 M.) *Port Costa*, see p. 466. From (39 M.) *Avon* a branch-road runs to (13 M.) *Walnut Creek* and (20 M.) *San Ramon* (see p. 519). At (50 M.) *Cornwall* we leave *Suisun Bay* (p. 465) and turn towards the S. About 2 M. to the S. of (68 M.) *Byron* are the *Byron Hot Springs* (130° Fahr.; Hotel, from $ 3). — 83 M. *Tracy* (65 ft.) is the junction of the old route to San Francisco viâ *Livermore* (famous for its Sauternes) and *Niles* and of a line to *Fresno* (p. 530) viâ *Los Baños* and *Mendota*, on the W. side of the *San Joaquin* ('Wahkeen') *River*. A little farther on we cross the San Joaquin and reach (94 M.) *Lathrop* (20 ft.; Hotel, with rail. restaurant, $ 1¼), the junction of the old line to *Sacramento* viâ *Stockton* (p. 465).

We now ascend the great **San Joaquin Valley**, the granary of California, 200 M. long and 30 M. wide, producing endless crops of grain and fruit, including oranges, figs, olives, raisins, and grapes. Irrigation is practised here on a gigantic scale, and many oil-wells are seen. 114 M. *Modesto* (85 ft.; 2024 inhab.). 127 M. *Turlock* (105 ft.; 650 inhab.). — 152 M. *Merced* (170 ft.; 1969 inhab.; Cosmopolis, Central, $ 2), a thriving trading and shipping centre, is the starting-place of the chief route to the Yosemite Valley (see p. 542). Various rivers are crossed. — 178 M. *Berenda* (250 ft.) is the junction of a branch-line to (21 M.) *Raymond*, forming one of the approaches to the *Yosemite Valley* (see R. 86). The *Sierra Nevada* is visible to the left, including Mts. Lyell (13,090 ft.), Tyndall (14,386 ft.), Whitney (14,502 ft.), and Goddard (13,602 ft.). — 185 M. *Madera* (272 ft.), a shipping-point for timber, brought from the mountains by a 'flume', 58 M. long. Near (197 M.) *Herndon* we cross

the San Joaquin. — 207 M. **Fresno** (290 ft.; *Hughes*, *Sequoia*, R. from $1), a well-built and well-paved city with 20,000 inhab., is the centre of a large raisin-growing district, which annually produces 75,000,000 pounds of raisins. The annual value of these and its other products, comprising brandy, olive-oil, fruits, grain, lumber, and dairy produce, amounts to at least $ 15,000,000. The water necessary for irrigation is brought from the mountains by an extensive system of canals.

From Fresno a loop-line runs viâ (52 M.) *Exeter* to (105 M.) *Famoso* (see below), where it rejoins the main line. On this line lies (20 M.) *Sanger Junction* (hotel), whence a tri-weekly stage runs to (45 M.) *Millwood* (5600 ft.; Camp $2; through return-fare from San Francisco $19.40). About 1½ M. to the S. of the latter lies the *General Grant Park*, comprising 125 mammoth trees, including 'General Grant', one of the largest Sequoias known (106 ft. in circumference at its base). About 7 M. farther to the S. lies the *Sequoia National Park* (p. 484). A road is now being constructed from Millwood to the *King's River Canyon* (see p. 484).

At (227 M.) *Kingsburg* (395 ft.) we cross *King's River* by a trestle-bridge. — 241 M. *Goshen* (285 ft.) is the junction of a line running to the W. to the productive oil-fields of (55 M.) *Coalinga* and (60 M.) *Alcalde*, and of another running to the E., viâ (8 M.) *Visalia* (p. 484), to (17 M.) *Exeter*, on the above-mentioned loop-line from Fresno to Famoso.

251 M. **Tulare** (285 ft.; *Grand Hotel*, $1-2), a flourishing little town with 2216 inhabitants. To the S. of Tulare is one of the California Experiment Stations for testing fruits, seeds, and grains. The irrigation in this district is largely provided by artesian wells, the water being raised by electric pumps.

About 7 M. to the W. of (262 M.) *Tipton* (270 ft.) lies *Tulare Lake*, a large body of water, at one time over 50 M. long, but which is gradually drying up. 282 M. *Delano*. From (294 M.) *Famoso* coaches also run to (60 M.) the Sequoia National Park (p. 484). — From (310 M.) *Oil Junction* a line runs to (6 M.) *Oil City*, in one of the more important oil-districts. — 314 M. *Bakersfield* (420 ft.; Southern, from $2½; Grand, $2½), with 4836 inhabitants.

From Bakersfield to Olig, 50 M., railway in 3 hrs. This line runs to the W., traversing one of the rich oil regions of the Upper San Joaquin valley, of which Bakersfield is the central shipping and marketing centre. Pipe-lines lead from this region to (300 M.) *Port Richmond*, for loading into vessels in the bay of San Francisco. This oil has greatly developed the manufacturing possibilities of the State (comp. p. 512), its cost as fuel being only one-third that of coal. Bakersfield is becoming a busy manufacturing town, and factory-chimneys and oil-derricks are now much in evidence. The grain and fruit lands of this region (150,000 acres) are irrigated by 3300 M. of canals, supplied with water by the Kern River.

At (336 M.) *Caliente* (1290 ft.) we leave the San Joaquin Valley and begin to ascend the ***Tehachapi Pass**, which crosses the Sierra Nevada between this valley and the Desert of Mojave. The line winds backwards and forwards and finally, at the **Loop* (3050 ft.), crosses its own track, at a height of about 80 ft. above the tunnel it has just threaded. Eight other short tunnels are passed through

before the summit is gained at (362 M.) *Tehachapi* (3965 ft.), beyond which the train runs along a plateau for some miles, passing a small salt lake, before beginning the descent to the desert. 371 M. *Cameron* (3790 ft.).

382 M. **Mojave** ('Mohávé'; 2755 ft.; *Railway Hotel*, $ 3), the junction of the *Santa Fé* and the *Southern Pacific Railroads* (see p. 484), is a handful of wooden shanties on the edge of the cheerless *Mojave Desert* described at p. 483. A large mining country is tributary to it. The Los Angeles line runs towards the S. across the desert, forming an almost absolutely straight line for many miles. *Mt. San Antonio* (p. 486) is seen in front, to the left, while the *San Bernardino Mts.* are faintly seen on the horizon (farther to the left). 396 M. *Rosamond* (2325 ft.). Beyond (407 M.) *Lancaster* (2355 ft.) we quit the desert for a hilly country, passing through several short tunnels and crossing the *Soledad Pass* (3200 ft.). 417 M. *Harold* (2820 ft.); 427 M. *Acton* (2670 ft.). We now descend steadily, through cuttings and over bridges.

452 M. **Saugus** (1170 ft.) is the junction of a branch-line to *Montalvo* (see p. 528).

The Los Angeles line runs towards the S. and beyond (454 M.) *Newhall* (hotel), a grain and cattle point, penetrates the *San Fernando Mts.* (ca. 3000 ft.) by a tunnel $1^1/_4$ M. long (1470 ft. above the sea), and traverses a gap amid brown hills with live-oaks. The *Valley of San Fernando*, which we now enter, is a great grazing valley, and its green orange and olive groves form a strong contrast to the desert we have been traversing. 463 M. *Fernando* (1068 ft.), with the ruins of the Spanish Mission of San Fernando. 474 M. *Burbank* (565 ft.), famous for its alfalfa, is the junction of the main Coast line (see p. 529). 478 M. *Tropico* (435 ft.) is famed for its strawberries ('Tropico beauties').

484 M. *Los Angeles* (290 ft.), see below.

83. Los Angeles.

Railway Stations. *Southern Pacific* (Pl. E, 3), Fifth St.; *Santa Fé* (*Atchison, Topeka, and Santa Fé;* Pl. F, 2, 3), Santa Fé Ave.; *Salt Lake* (*San Pedro, Los Angeles, and Salt Lake;* Pl. F, 2, 3), First St.

Hotels. Angelus (Pl. g; D, 2), cor. of 4th and Spring Sts., from $ 4, R. from $ 2; Alexandria (Pl. a; D, 2, 3), 5th St., R. from $ 2; Westminster (Pl. i; E, 2), cor. of 4th and Main Sts., R. from $ $1^1/_2$; Lankershim (Pl. l; D, 3), cor. of 7th St. and Broadway, R. from $ $1^1/_2$; Van Nuys Hotel (Pl. b; E, 2), cor. of 4th and Main Sts., R. $ 1-5; Hollenbeck (Pl. c; E, 2), cor. of 2nd and Spring Sts., R. from $ 1; Hayward (Pl. h; D, 3), cor. of 6th and Spring Sts., R. from $ 1; Nadeau (Pl. n; E, 2), cor. of 1st and Spring Sts., R. from $ 1; Melrose (Pl. m; D, E, 2), 120 Grand Ave., from $ 2; Fremont (Pl. f; D, 2), 4th St., from $ $2^1/_2$, R. from $ 1; Rosslyn (Pl. o; E, 2, 3), Main St., near 5th St., from $ $1^1/_2$, R. from 75 c. — The following hotels are farther from the centre of the city: Alvarado (Pl. d; B, C, 1), cor. 6th and Alvarado Sts., from $ 3; Pepper (Pl. p; C, 2), cor. 7th St. and Burlington Ave.; Leighton (Pl. e; B, 1); Hershey Arms (Pl. k; B 1).

Restaurants. At all the larger hotels; also, *Levy's*, 3rd and Main Sts.; *The Bristol*, N.E. cor. of 4th and Spring Sts.; *Christopher's*, 241 S. Spring St., *Woman's Exchange*, 3rd and Hill Sts. (these two for ladies).

Electric Cars (5 c.) traverse the chief streets and run to the suburbs. — '*Seeing Los Angeles*' *Observation Cars and Automobiles* (comp. p. 19), with guides, twice daily (50 c.).

Clubs. *Jonathan*, cor. 6th and Main Sts.; *California*, cor. 5th and Hill Sts.; *Los Angeles Country Club*, cor. Western Ave. and Pico St. (beyond Pl. A, 3); *Woman's Club* (p. 534), 940 S. Figueroa St.

Places of Amusement. *Auditorium Theatre* (Pl. D, 2), cor. 5th and Olive Sts.; *Belasco Theatre* (Pl. E, 2), Main St., near 3rd St.; *Burbank Theatre* (Pl. D, E, 3), Main St., near 5th St.; *Mason Opera House* (Pl. E, 2), Broadway, between 1st and 2nd Sts.; *Grand Theatre* (Pl. E, 2), cor. Main and 1st Sts.; *Orpheum* (Pl. E, 2), Spring St., near 3rd St. (vaudeville); *Chutes*, Main and Washington Sts.

Post Office (Pl. E, 2), Federal Building, Temple St. (temporary post office at S.W. cor. of 7th & Grand Sts., Pl. D, 3).

British Vice-Consul, *Mr. Charles White Mortimer*, 71 Temple Building.

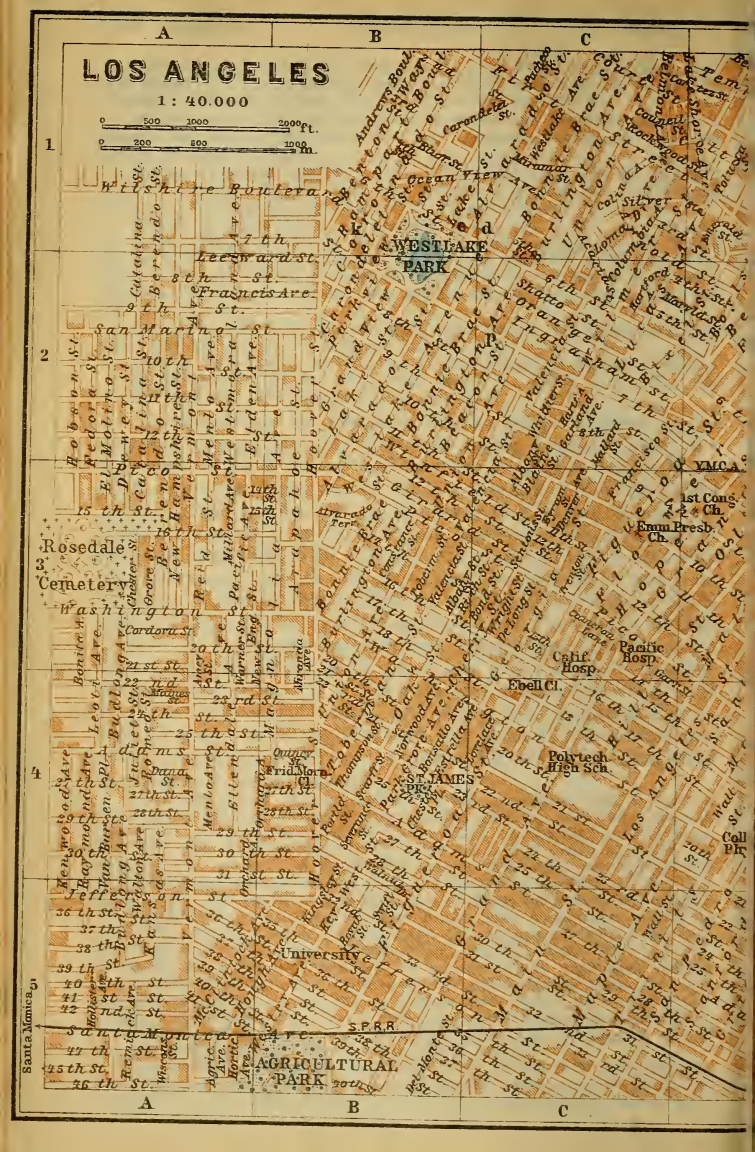
Hotel and Travel Bureaus. *Peck-Judah Co.*, 553 S. Spring St.; *The Times Travel and Hotel Bureau*, 531 S. Spring St.

Los Angeles, or *La Puebla de Nuestra Señora la Reina de Los Angeles* ('City of Our Lady the Queen of the Angels'; g hard), the metropolis of the S. part of California, lies on the *Los Angeles River*, 20 M. above its mouth and 15 M. in a direct line from the Pacific Ocean. It was founded by the Spaniards in 1781 and passed into American possession in 1846. It was, however, of no great importance till after 1880, when it underwent an almost unprecedentedly rapid increase in wealth and population. Its population rose from 11,183 in 1880 to 50,395 in 1890 and to 102,479 in 1900 (now probably 200,000), and its adobé houses have given place almost entirely to stone and brick business blocks and mansions and tasteful wooden residences, some of the latter showing an effective use of Spanish-Moorish architecture. It is now a crowded and lively town of wide streets and spacious side-walks, with an extensive residential quarter, 130 churches, over 60 public schools, and about 1700 manufactories, with a total annual produce of the value of $50,000,000. It publishes newspapers in seven languages.

Los Angeles is a railway-centre of great importance and a focus of the characteristic Californian industry of fruit-growing. The plains and valleys around it are covered with vineyards, olive, orange, and lemon groves, and orchards. In 1906-7 the value of the fresh fruit produced in Los Angeles County amounted to $6,213,539, that of dried fruit and vegetables to $1,462,429, and that of canned fruit and vegetables to $417,215. Los Angeles is also the centre of a district that produces petroleum and asphalt.

Though less specifically a health resort than some other places in California, Los Angeles enjoys a mild and equable climate, with a tendency to coolness at night (mean annual temp., Jan. 54°, Aug. 72°). The city, especially the residential quarters, is embowered in vegetation, among the characteristic features of which are the swift-growing eucalyptus, the graceful pepper-tree, many palms, Norfolk Island pines, live-oaks, india-rubber trees, orange-trees, roses, geraniums, yuccas, century plants, bananas, calla lilies, and pomegranates. M. Jules Huret calls Los Angeles one of the few really beautiful cities in the United States.

The South Part of California, of which Los Angeles is the principal city, possesses, perhaps, an all-the-year-round climate that approaches perfection as nearly as any other known to us. It is a semi-tropical climate with


LOS ANGELES
1 : 40.000
0 500 1000 2000 ft.
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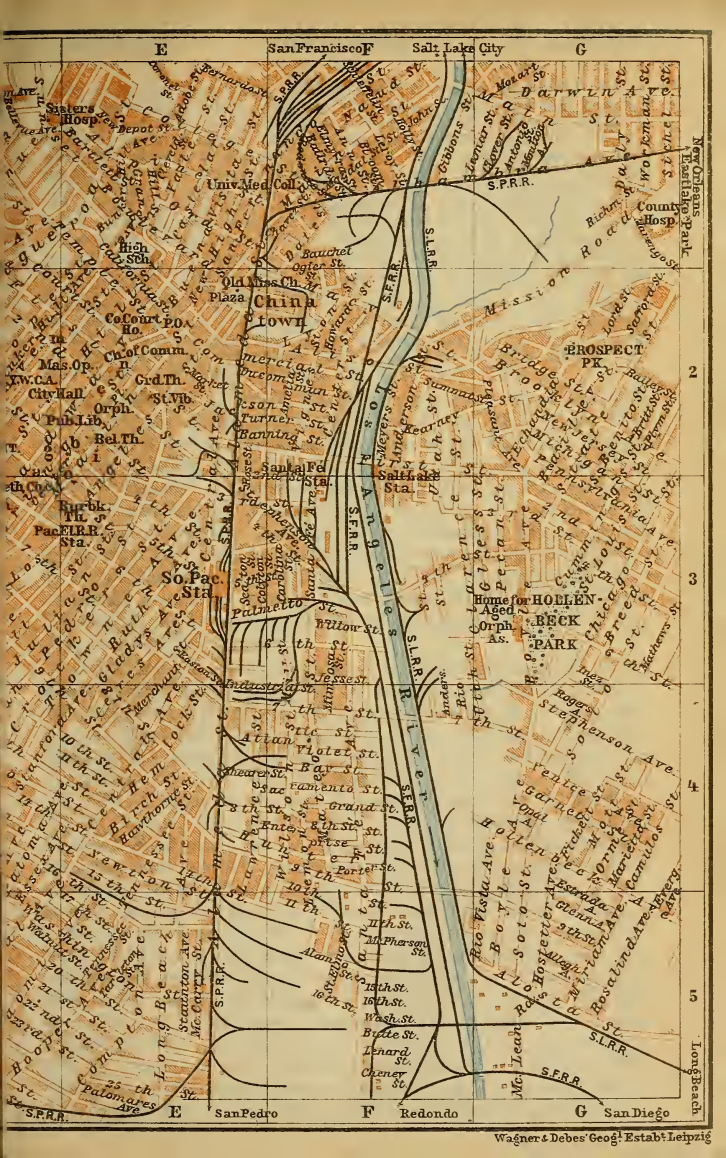
A
B
C
1
2
3
4
5
Wilshire Boulevard
Ocean View Ave.
WESTLAKE PARK
7th St.
Lee Ward St.
8th St.
Francis Ave.
9th St.
San Marino St.
10th St.
11th St.
12th St.
13th St.
14th St.
15th St.
16th St.
Rosedale Cemetery
Washington St.
Cordova St.
20th St.
21st St.
22nd St.
23rd St.
24th St.
25th St.
26th St.
27th St.
28th St.
29th St.
30th St.
31st St.
Jefferson St.
36th St.
37th St.
38th St.
39th St.
40th St.
41st St.
42nd St.
Santa Monica Blvd.
43rd St.
25th St.
26th St.
Santa Monica
Hoover St.
Vermont Ave.
Normandie Ave.
Western Ave.
Hobart Blvd.
Edgeware Rd.
Beverly Blvd.
Alvarado St.
Glendale Blvd.
Echo Park
Temple St.
Sunset Blvd.
Hollywood Blvd.
Melrose Ave.
Fountain Ave.
Santa Monica Blvd.
Pico St.
Olympic Blvd.
Washington Blvd.
Adams Blvd.
Jefferson St.
Exposition Blvd.
Vernon Ave.
Slauson Ave.
Florence Ave.
Manchester Ave.
Century Blvd.
Imperial Highway
Los Angeles River
Main St.
Broadway
Hill St.
Olive St.
Grand Ave.
Figueroa St.
Flower St.
Hope St.
Bunker Hill
Angels Flight
Court of Flowers
Court of Palms
Court of Fountains
Court of Pioneers
Court of Seasons
Court of Abundance
Court of Statuary
Court of Sunset
Court of Honor
Court of Reflections
Court of Lilies
Court of Gardens
Court of Terraces
Court of Ages
Court of Universe
Court of Flags
Court of Peristyle
Court of Palms
Court of Fountains
Court of Pioneers
Court of Seasons
Court of Abundance
Court of Statuary
Court of Sunset
Court of Honor
Court of Reflections
Court of Lilies
Court of Gardens
Court of Terraces
Court of Ages
Court of Universe
Court of Flags
Court of Peristyle
Y.M.C.A.
1st Cong. Ch.
Emm. Presb. Ch.
Pacific Hosp.
Calif. Hosp.
Ebell Cl.
Polytech. High Sch.
ST. JAMES PARK
Fri. Morse Ct.
University
S.P.R.R.
AGRICULTURAL PARK
Coll. Pl.



Wagner & Debes' Geogl. Estabt. Leipzig

little frost, no snow, and moderate winter rains, remarkable for its equableness and dryness. Winter and summer are terms that here lose their ordinary significance their place being taken by what may almost be called a perpetual spring. Sea-bathing may be practised in Dec. or Jan., while the dryness of the atmosphere and the ocean breezes make the summer much less trying than in places farther to the E. The wild flowers of California, of which the golden poppy (*Eschscholtzia Californica*) is one of the most characteristic, are extraordinary in number, variety, and brilliancy. 'The greatest surprise of the traveller is that a region which is in perpetual bloom and fruitage, where semi-tropical fruits mature in perfection, and the most delicate flowers dazzle the eye with color the winter through, should have on the whole a low temperature, a climate never enervating, and one requiring a dress of woollen in every month' (Warner). Comp. 'Our Italy', by *Chas. Dudley Warner;* 'To California and Back', by *C. A. Higgins* (1903); 'Southern California', by *C. A. Keeler* (1903); 'Glimpses of California', by *H. H. Jackson* (new ed., 1902); 'The Land of Little Rain', by *Mary Austin* (1903); and 'The Wonders of the Colorado Desert of Southern California', by *G. W. James* (1906).

Broadway (Pl. D, E, 3, 2), running parallel to *Main Street* (Pl. C-F, 5-1), the dividing line for E. and W. (as First St., Pl. C-G, 1, 2, is for N. and S.), contains many substantial buildings. Among these are the *City Hall* (Pl. D, E, 2), between 2nd and 3rd Sts., and the new *Chamber of Commerce* (Pl. E, 2). The latter contains an interesting collection of California products, the Palmer collection of Indian antiquities, and the Coronel collection, illustrating the Spanish period. Here is also the first cannon brought to California by Padre Junipero Serra (p. 525) in 1769. In Temple St., near Broadway, stands the *County Court House* (Pl. E, 2). The *Public Library* (Pl. E, 2), at the S.E. cor. of Broadway and 3rd St., contains over 110,000 volumes.

Other edifices worthy of mention are the *Woman's Club*, in the Mission-Renaissance' style (940 S. Figueroa St.; Pl. C, D, 2, 3), the *State Normal School* (cor. Grand Ave. and 5th St.), the *Security Savings Bank* (cor. Spring and 5th Sts.), the *Union Trust* and *Hellman Buildings* (at opposite corners of Spring and 4th Sts.), the *Auditorium* (Pl. D, 2; cor. 5th and Olive Sts.), the *Y. M. C. A.* (Pl. D, 2, 3; Hope St., between 7th and 8th Sts.), the *Y. W. C. A.* (Pl. D, 2; cor. Hill and 3rd Sts.), the *Farmers and Merchants National Bank* (cor. 4th and Main Sts.), the *Grant Building* (cor. Broadway and 4th St.), *Hamburger's* (cor. Broadway and 8th St.), *Merchants Trust* (207 Broadway), and the *International Bank* (cor. Temple, Spring, and Main Sts.). The *Viaduct of the Electric Tramway*, in San Fernando St. (Pl. E, F, 1), spanning the railway tracks on the E. side of the city, is an interesting piece of engineering. Los Angeles also contains many *Parks*, including the *Griffith Park* of 3000 acres, and the *Eastlake Park* (beyond Pl. G, 1) and *Westlake Park* (Pl. B, 1, 2), each with a small lake. The *University of Southern California* (Pl. B, 5; 1260 students) is situated at Wesley Ave. and 35th St. There is a new and model *Racecourse* in the suburbs. The small plaza, with the *Old Mission Church* (Pl. E, 2), at the N. end of the business-town, is interesting as a survival of the ancient settlement.

Just beyond is a genuine *Chinatown* (Pl. E, F, 2; comp. p. 515), keeping many of the original adobé structures. *Sonora Town*, the surburb to the N., remains unchanged since Fremont hoisted the flag in 1846. An excellent view of the city can be obtained from the tower at *'Angel's Flight'*, cor. Hill and 3rd Sts. (Pl. D, 2). A visit may also be paid to the oil belt, with its curious pumps. Opposite Eastlake Park (p. 533) is an **Ostrich Farm*, where some 200 adult birds may be seen (adm. 25 c.).

Los Angeles is a busy centre for short trips, chiefly made now by electrie cars, which are both more frequent and more accessible than the steam railways. Round-trip tickets may be procured either from the conductor or at the offices (latter advisable on crowded days to ensure a seat). The *Los Angeles & Pacific R. R. Co.* has its office at 316 W. 4th St.; the *Los Angeles & Redondo R. R. Co.* at 217 W. 2nd St.; the *Pacific Electric Ry. Co.*, at the cor. of 6th and Main Streets (Pl. D, E, 3; also station); and the *Los Angeles Railway Co.* in the same building.

From Los Angeles to Santa Monica, 17 M., *Southern Pacific Railway* in 58 min.; or *Los Angeles & Pacific* electric car in 1 hr. (round-trip 50 c.; cars every 1/2 hr.; four routes; advisable to go one way and return another). — On the way we pass *Hollywood*, a suburb of charming homes, and *Sawtelle*, with the Pacific branch of the *National Soldiers' Home* (2000 veterans). — Santa Monica (*North Beach*, R. from $ 2; *Clarendon*, from $ 2), a popular seaside-resort, has a good beach, on which surf-bathing may be enjoyed all the year round (bath-house with warm-water swimming-pool). About 3 M. off is *Port Los Angeles*, with a large wharf. The trip may be extended to the S. along the shore through a succession of seaside resorts, such as *Ocean Park* (Decatur Hotel, $ 3), *Venice* (with canals, etc., in imitation of its European namesake), *Playa del Rey*, and *Moonstone Beach*, to *Redondo*.

From Los Angeles to Redondo, by the *Santa Fé Railway* (one train), 23 M., in 1 1/4 hr.; or by electric cars (20 M.; hourly; round-trip 50 c.). — The *Los-Angeles-Pacific* cars proceed to *Playa del Rey*, and then along the coast to Redondo. — The *Los Angeles & Redondo Ry.* proceeds either viâ *Inglewood*, a pleasant town of suburban homes, or viâ *Gardena*. — Redondo (**Redondo Hotel*, from $ 2 1/2), another pleasant sea-bathing resort, has a beautiful beach and good facilities for boating and fishing. The great Tent City for summer residents, with its large *Auditorium* accommodating 4000 people, is a novel feature. There is a deep-water pier, and Redondo is becoming of importance asa shipping-port. Steamers ply hence to San Francisco and San Diego.

From Los Angeles to Long Beach, 21 M., *Salt Lake Railway* (see p. 535), or *Southern Pacific*, in 3/4 hr., or *Pacific Electric Railway* (every 20 min.; round-trip 50 c.). — Long Beach (*Virginia*, new; *Riviera*, $ 2-3; *Del Mar*, R. from $ 1; *Julian*, $ 2-2 1/2), a frequented summer-resort, with 2250 inhab., has an excellent beach, a bath-house with 280 swimming-pools, a pier extending 1800 ft. into the sea, and other attractions. The electric railway goes on along the shore to (40 M.) *Newport Bay*.

The so-called Great Surf Route forms a pleasant circular tour of 100 M. (fare $ 1). We take a car of the Pacific Electric Railway (6th and Main Sts.) at 10.15 a.m. and proceed viâ *Compton* (the centre of the dairy district), the famous *Dominguez Ranch*, and thence on through orchards and ranches to *Sunset Beach*, whence the car runs along the shore to *Long Beach* (see above), where a steamer is taken for *San Pedro* and return. The car regains Los Angeles at 4.45 p.m.

From Los Angeles to San Pedro, 22 M., *Southern Pacific Railway* in 50 min., or *Pacific Electric Railway* (hourly; round-trip 50 c.). — 5 M. *Florence*, the junction of the line to San Diego (p. 538); 10 M. *Compton;* 18 M. *Thenard*, the junction of a branch-line to (4 M.) *Long Beach* (see above); 19 M. *Wilmington*, a small seaport. — 22 M. San Pedro (*Oxford*, *Colonial*, $ 2), with 1787 inhab., is the chief seaport of Los Angeles and Pacific

Mojave
Barstow
Mt Lowe
Mt Wilson
Sierra Madre Mts
Monrovia Hill
Harvard
Echo Mt
Altadena
Sierra Madre
Lamanda Park
Pasadena
Duarte
Glendora
S. Gabriel Valley
S. Dimas
Lordsburg
Claremont
Upland
N. Cucamonga
Rosena
Rialto
Cucamonga Pk
Mt San Antonio
San Antonio
Irvington Station
Arrowhead
Sta Bernardino
Redlands
Loma Linda
Colton
Bloomington
Jurupa Mts
Riverside
Highgrove
Potato
Pedley
Santa Ana R.
Delezville
Stalder
Ontario
S. Cucamonga
N. Pomona
Pomona
Covina
San Jose Hills
San Jose Creek
Puente
Bassel
Elmonte
Mas Home
Azusa
Glendale
Tropico
Garvanza
Hollywood
Sta Monica Mts
Sta Monica
Ventura
Los Angeles
LOS ANGELES
Brooklyn Heights
Newvale
Jobart
Sherman
Mt Vista
East Los Angeles
Ramona
Gabriel
Rubio Wash
Workman H.
Rowland
Walnut
Puente H.
Whittier
Los Nietos
Santa Fe Springs
Downey
Norwalk
Studebaker
Workman
Clearwater
La Mara
Fullerton
Ridgefields
Rincon
Corona
Arlington
Alessandro
Rendalia
Gallina
Moody
Almond
Anaheim
Benedict
Olive
Orange
Wanda
El Modena
Santiago Creek
Sierra Santa Ana
Temescal
Perris
Temecula
Los Alamitos
Alamitos Heights
Miraloma
Gardena
Grove
Westminster
Santa Ana
Tustin
Smeltzer
La Bolsa
Fairview
Modjeska
El Toro
French Hill
Los Cerritos
Wilmington
San Pedro Bay
Long Beach
Anaheim Bay
S. Pedro
S. Pedro B.
Pt Vincente
Pt Fermin
Bolsas Creek
Huntington Beach
Newport Beach
San Joaquin
PACIFIC OCEAN
Redondo
Inglewood
Compton
Watts
Florence
Walker
Stanton
Howard Summit
Black Gumma
Moneta
Belvedere
Oliver
Slough
Carson
Watson
Burby
Dominguez
Nigger
Willows
Thenard
Alamitos
Seaside
Alamitos Bay
Los Angeles R.
Santa Ana R.
SOUTHERN CALIFORNIA
Scale 1 : 750.000
Statute Miles
Kilometres

terminus of the Salt Lake Route (comp. p. 503 and below). Its harbour has been improved at great cost, and the National Government is now constructing a huge breakwater here. Steamers ply hence regularly to San Francisco, Santa Barbara, San Diego, Catalina, etc. — San Pedro may also be reached by the *Salt Lake Railway* (27 M., in 1 hr.), which runs viâ (21 M.) Long Beach (p. 534) and ends at East San Pedro, on *Rattlesnake Island*.

[From San Pedro steamers ply regularly to (25 M.) ***Santa Catalina** (round trip from Los Angeles $ 2¾), a beautiful mountainous island, with fine rocky coasts, which has lately been much frequented for its delightful climate (usual temperature 60-70° Fahr.) and excellent fishing (tuna, flying fish). The only resort is **Avalon** (*Metropole*, $ 3-7, R. from $ 1; **Grand View*, from $ 1½, simple; numerous boarding-houses and lodgings), situated on the N.E. side of the island, facing a crescent-shaped bay under the lee of the mountains. Trips in glass-bottomed boats, with open-sea aquarium in sight below (so-called 'Marine Gardens'), golf, and inland drives are among the diversions of the place. Wild flowers are very abundant. Avalon has the credit of having started the first newspaper ('The Wireless') entirely dependent on wireless dispatches, which are sent daily by its correspondent at Los Angeles. — See 'Santa Catalina', by *C. F. Holder*.]

From Los Angeles to San Gabriel, by *Southern Pacific Railway*, 9 M., in ½ hr. (comp. p. 549), or by *Pacific Electric* cars (every ½ hr). The route passes *Stoneman's Ranch* (p. 537) and *Shorb* (p. 549). — *San Gabriel*, with its mission church, see p. 549.

From Los Angeles to Sierra Madre, the so-called 'Mission and Orange Grove Route' (fare $ 1). We take a car of the Pacific Electric Railway (see above) at 9.40 a.m., stopping at *San Gabriel Mission* (p. 549), *Baldwin's Ranch* (see below; time allowed for luncheon and for inspection of the estate), and (17 M.) *Sierra Madre* (see below). The return is made viâ *Pasadena* and the *Ostrich Farm* (p. 534), and Los Angeles is regained at 3.20 p.m.

From Los Angeles to Monrovia, 18 M., *Pacific Electric Co.* every ½ hr. This is, perhaps, the pleasantest trolley-trip near Los Angeles, running through orange-groves and affording the best view of the San Bernardino Mts. The route passes (17 M.) *Arcadia*, the station for *Baldwin's Ranch*, with a race-track and the best stud of thoroughbred horses in the West. — *Monrovia* (Vista Grande Hotel, $ 2-3½) may also be reached by railway (comp. pp. 486, 549).

From Los Angeles to North Glendale, 10 M., *Pacific Electric Railway* in ½ hr. (fare 15 c.; return-fare 25 c.). Near the terminus is the *Casa Verdugo*, a restaurant in the Spanish style.

From Los Angeles to Mt. Lowe, by *Pacific Electric Railway* (return-fare $ 2.50). This trip may be made in a short day, starting at 9 or 10 a.m. and regaining Los Angeles between 3 and 6 p.m. — For a description of the route, see p. 537.

From Los Angeles to Mt. Wilson. The *Pacific Electric Railway* is taken to (17 M.) *Sierra Madre* (return-fare 50 c.), whence the ascent is made by 'burros' ($ 2).

Trip round the 'Kite-Shaped Track' (166 M.). This popular excursion by the Santa Fé R. R. may be made in one day (with start at 8.30 a.m.) or may be spread over several days (fare $ 3, with stopovers; Sun. excursion, returning same day, $ 2.05). — The train runs viâ *Pasadena* (p. 536), *Santa Anita* (p. 486), *Upland* (p. 486), and *San Bernardino* (p. 485) to (69 M.) Redlands (1350 ft.; **Casa Loma*, from $ 3; *Wissahickon Inn*, from $ 2½; *Hill Crest Inn*), an orange-growing city with 4797 inhab., finely situated on the slopes of the foot-hills, with good views of the San Bernardino Mts. (N.) and Mt. San Jacinto (S.). Time is allowed here for luncheon or for a drive to the beautiful **Smiley Heights* and *Prospect Park*. Leaving Redlands (about 1 p.m.), we return viâ (72 M.) *Mentone* and (79 M.) *Highland* to (87 M.) *San Bernardino*, whence we proceed over the larger loop, viâ *Colton* (p. 550), to *Riverside* (p. 486), where the train halts for about 2 hrs., to allow of a drive (comp. p. 486). Thence we return to (166 M.) *Los Angeles* viâ *Casa Blanca*, *Corona*, *Orange* (p. 538), *Anaheim* (p. 537), *La Mirada*, and *Redondo Junction* (p. 537).

The 'Inside Track Flyer' of the Southern Pacific Railway (150 M.) offers an excursion similar to that just described, lasting from 8.55 a.m. to 6.50 p.m. (fare $ 3). It takes us viâ *San Gabriel*, *Pomona*, *Ontario*, and *Colton* (see pp. 549, 550) to *Riverside* (p. 486; halt of about 2 hrs), then viâ *Loma Linda* (Loma Linda Hotel) to *Redlands* (p. 535; stop of 2⅓ hrs.), and finally back viâ *Pomona* and *Covina* to *Los Angeles*.

[From Redlands (p. 535) a coach (fine views) runs thrice weekly viâ (18 M.) *Fredalba* to (41 M.) *Bear Valley* (6400 ft.; Henry's Hotel), where a gigantic reservoir has been formed by damming up a mountain-gorge.]

The so-called 'Balloon Route' of the *Los Angeles Pacific Co.* gives a circuit of 70 M., including 28 M. along the Ocean, for a fare of $ 1.

From Los Angeles to *Pasadena*, see below; to *San Diego*, see R. 85; to *Santa Barbara* and *San Francisco*, see R. 82; to *New Orleans*, etc., see R. 110.

84. From Los Angeles to Pasadena.

Pasadena, which lies about 10 M. to the N.E. of Los Angeles may be reached either by steam-railway or electric car. The lines of the San Pedro, Los Angeles, & Salt Lake Railway and the Santa Fé Railway, both ascend the valley of the *Arroyo Seco* ('dry river'), passing several small intermediate stations and taking about ½ hr. to the trip (return-fare 25 c.). The Southern Pacific Railway route viâ *Shorb* (p. 549; 11 M., in ½ hr.) is a little longer (same price).

The Pacific Electric Railway offers three different routes to Pasadena, taking ½-¾ hr. (fare 15 c.; return-fare 25 c.).

Pasadena (830 ft.; **Hotel Green*, with large annex, $ 4-8, R. from $ 2; *Raymond; La Pintoresca*, from $ 3; **Maryland*, $ 3-6; *Casa Grande*, $ 3-5, these two open all the year; many smaller hotels and boarding-houses), a thriving business city and health-resort (9117 inhab. in 1900), lies on the level floor of the fertile *San Gabriel Valley*, about 5 M. from the base of the *Sierra Madre Range* (2000-11,000 ft.). To the S.E. rises *Oak Knoll*, a small hill commanding a splendid *View across the valley, with its glossy-green orange-groves, to the snow-topped wall of the Sierra Madre. *Mt. San Antonio* (p. 486), in the San Bernardino Range, is seen overtopping the Sierra Madre to the N.E., while the *San Jacinto Mts.* (p. 550) are visible on the S.E. horizon. To the S. and S.W. lies the ocean, with the mountainous islands of *Santa Catalina* (p. 535) and *San Clemente* (with its curious rivers of sand and relics of an unknown race).

The city of Pasadena is well laid out and contains good *Schools*, *Churches*, a **Public Library* (notable for its excellent management), an *Opera House*, and other substantial buildings. The wealth of vegetation in the streets and gardens includes the eucalyptus, pepper-trees, olives, lemon and orange trees, cork and india-rubber trees, date and fan palms, bananas, guavas, Japanese persimmons, locust trees, and other trees and shrubs too numerous to name. The annual *Floral Parade & Rose Tournament* (Jan. 1st) attracts thousands of onlookers from Los Angeles and elsewhere. The roads in the neighbourhood are good, and many pleasant drives may be made. Comp. 'All about Pasadena', by *C. F. Holder*.

One of the most popular excursions from Pasadena is the ascent of *Echo Mountain* and of *Mount Lowe* (see p. 537). — The ascent of *Mt. Wilson

(6665 ft.) is generally accomplished by the electric tramway to (5 M.) *Sierra Madre* (25 c.; comp. p. 535) and thence to the summit over a good trail by burro ($ 2). At the top is the *Solar Observatory* of the Carnegie Institution (p. 222). The *View is extensive and very beautiful. This trip may be pleasantly spread over two days by passing the night at the *Mt. Wilson Hotel* ($ 3), on the top, or at *Strain's Camp* ($ 2), on the N. side, 1/2 M. below the top. The ascents of Mt. Lowe and Mt. Wilson are also often made from *Santa Anita* (p. 486). — The **San Gabriel Mission* (p. 519) lies 3 1/2 M. to the S.E. of Pasadena; the road to it leads through large orange-groves. — Among other easily accessible points of interest near Pasadena are *Stoneman's Ranch*, with fine orange-groves, 1 M. to the S.; *Sunny Slope Winery*, 3 1/2 M. to the E.; the *Shorb* or *San Gabriel Winery*, 2 1/2 M. to the S.; *Baldwin's Ranch* (p. 535), 5 M. to the E.; the *Ostrich Farm* (adm. 25 c.), 1 1/2 M. to the S.W.; *Millards' Canyon*, 5 M. to the N.; *Arroyo Seco Canyon*, 5 M. to the N.W., reached viâ the *Devil's Gate* (tramway); *Linda Vista*, 2 M. to the N.E; and **La Cañada Valley*, 4 1/2 M. to the N.W. The last five points may be easily combined in one circular drive. *Mt. Disappointment* (5200 ft.) and *Brown's Peak* (5300 ft.) may be ascended (with guide) by those who are fond of mountain-climbing. *Mt. San Antonio*, 27 M. to the N.E., is best ascended from *Upland* (see p. 486).

The sportsman will find abundance of game for his gun in the vicinity of Pasadena, including bears in the remoter recesses of the mountains. Coursing is also practised, the hares or jack-rabbits affording good sport.

Beyond Pasadena the 'Short Route' of the Pacific Electric Co. (see p. 536) goes on to (6 M.) **Altadena** (1300 ft.), near the foot of the Sierra Madre. Immense tracts here are covered in winter by brilliant poppies.

From Altadena the Pacific Electric Railway, starting from Los Angeles, runs to (2 1/2 M.) the *Rubio Falls* in the *Rubio Canyon* (1900 ft.), whence a Great Cable Incline, 1000 yds. long, ascends to the summit of **Echo Mountain** (4015 ft.; return-fare from Los Angeles $ 1 1/2), which commands a wide and beautiful view. Here are the *Lowe Observatory* (with a 16-inch equatorial telescope open to visitors) and a collection of native wild animals. — From Echo Mt., the mountain-railway goes on to the *Alpine Tavern* (5000 ft.; $ 3-3 1/2). Hence we may ascend on foot or on pony-back ($ 1 each, including share of guide) to the top of **Mt. Lowe** (6100 ft.), which commands a *View extending for over 100 M. in every direction. The route skirts the wonderful *Grand Canyon*. The return-trip from Alpine Tavern to Echo Mt. is made by gravity.

85. From Los Angeles to San Diego and National City. Coronado Beach.

132 M. Santa Fé Railway to (126 M.) *San Diego* in 4 hrs. (fare $ 3.85 return-fare, good for 14 days, $ 6, for 30 days $ 7.50; chair-car 50 c.) and to (132) *National City* in 4 1/2 hrs. (fare $ 3.95).

Los Angeles, see p. 531. 2 M. *Redondo Junction*, for the line to *Redondo* (p. 534). The train runs at first through groves of oranges and walnuts and afterwards over meadows. A good view is obtained to the left, above the foot-hills, of the *Sierra Madre* (p. 536). Beyond (7 M.) *Bandini* we cross the *Los Angeles* and *San Gabriel Rivers*. At and beyond (10 M.) *Rivera* many oil-well pumps are seen on the heights. 13 M. *Santa Fé Springs* (155 ft.); 27 M. *Anaheim* (Commercial Hotel, $ 2), a pleasant little town, in one of the best orange-growing districts of the State. We cross the

S. Pacific Railway. English walnut-trees are frequent, and we now meet with the first olive-orchards, with small gray trees like those of S. France. Before reaching (31 M.) *Orange* (180 ft.; The Villa, from $ 2), the junction of the line from San Bernardino (see p. 485) and a centre for celery and pea-nut growing, we cross the wide sandy bed of the *Santa Ana River*. This part of the line passes through numerous fine orange-groves. — 34 M. *Santa Ana*, a fruit-packing town, is the junction of a short line to (11 M.) *Newport Beach*, on the coast. Near (47 M.) *El Toro* (425 ft.), whence stages run to (9 M.) *Laguna Beach* (fare 25 c.), is *Modjeska*, the winter-home of Mme. Modjeska. We now descend rapidly through a rolling green country, not unlike the fells near Appleby and Carlisle. To the left, at (56 M.) *Capistrano*, are seen the interesting ruins of the *Mission of San Juan Capistrano*, founded in 1776 and overthrown by an earthquake in 1812. It has been rescued from farther ruin and partly restored by the 'Landmarks Club', which devotes itself to such work along this coast, and is still used for services. We reach the ocean at (59 M.) *San Juan* ('Hooahn'), and henceforward for nearly 60 M. have it close to us on the right. A little below is *Dana's Point*, over which the hides were hurled, as narrated in Dana's 'Two Years before the Mast'. — From (85 M.) *Oceanside* (Miramar, from $ 2) a drive (team with driver, $ 2) may be taken to the (4 M.) *Mission of San Luis Rey de Francia*, which, after standing empty and in ruins for nearly a century, is again occupied by Franciscans. A branch-line runs from Oceanside to (20 M.) *Fallbrook* and (23 M.) *Escondido*. Fine views of the ocean to the right. At (108 M.) *Sorrento* we begin the ascent of a steep grade to (112 M.) *Linda Vista*, beyond which we descend, passing from a rich fruit-growing country of lemons, figs, loquats, olives, and many other varieties, into a country of vast plains, rolling back to the foot-hills on the east, all given over to sheep-grazing.

126 M. **San Diego** (*U.S. Grant Hotel*, new; *Robinson*, situated on a hill above the town, $ 2½-4; *Helix*, from $ 2, small but well spoken of; *Brewster*, R. from $ 1; Brit. vice-consul, *Mr. Allen Hutchinson*), a city of (1900) 17,700 inhab. (now probably doubled), is rapidly growing, carries on a considerable fish-industry, and contains many churches, schools, public buildings, and public parks. It lies on a bay of its own name and has the best harbour on the Californian Coast after that of San Francisco. Steamers ply regularly to San Pedro (p. 534), San Francisco, and ports in Lower California, and sailing vessels to Hawaii, Australia, and numerous Californian ports, while a through-car (sleeper) runs over the Santa Fé route, on the 'California Limited', to Chicago in 3 days. The climate is mild and equable (mean temp., Jan. 54°, Aug. 70°), and the country is very fertile, both in fruit and grain. Mulberry-trees thrive here, and a silk-industry is growing up. The city contains a U. S. garrison (Fort Rosecrans), and also possesses a U. S. jetty, new quarantine and

naval coaling stations, and fortifications. The following excursions may be made nearly as well from *Coronado Beach* (see below) as from San Diego.

About 6½ M. to the N. of San Diego is the old *Mission of San Diego*, the first settlement (1769) made by white men in California. Its olive-groves are very prolific. The Mission may be reached by taking the electric car to (4 M.) the hills overlooking the *Mission Valley*, and thence on foot (2½ M. to Mission from car-terminus); or we may drive all the way, descending the curious and very steep '*Mission Grade*'. Drivers should return by the *Old Town of San Diego* (the original settlement), with its adobé buildings, the house in which Ramona was married (see *H. H.*'s 'Ramona'), the Spanish church-bells (100 years old), and a mission-school attended by Indian and white children. — Other favourite points are (5 M.) *Paradise Valley;* the *Sweetwater Dam* (14 M. to the E.), 396 ft. long, 90 ft. high, and 12-46 ft. thick, forming a reservoir with a capacity of 6,000,000,000 gallons (these two best reached by the National City Otay R. R. from San Diego to *Tia Juana*, p. 540; return-fare $ 1); *Pacific Beach*, reached by a steam-tramway (10 M.) or motor-car; *La Jolla Cave* ('Hoya'), with the curious 'Alligator Rock', 14 M. to the N.W., which can be entered only when the tide is out (this and Pacific Beach may be combined with a visit to the Old Town by taking the San Diego, Pacific Beach, & La Jolla Railroad); and *El Cajon Valley* ('Cahon'), 15 M. to the N.E. (reached by the San Diego, Cuyamaca, & Eastern R. R.). — A fine automobile trip, over one of the loveliest roads in California, may be made to *Warner Springs* (Hotel, from $ 2), 70 M. to the E. (return-fare, $ 11). Or we may use the railway as far as (25 M.) *Foster* and go on thence by stage.

An interesting trip by steamer (once weekly) may be made from San Diego to (11 hrs.) *Ensenada* (Iturbide, $ 2), a town in Lower California, Mexico, with golf-links, a fine climate, and wild scenery.

Coronado Beach, on a small peninsula immediately opposite San Diego and forming the outer arm of San Diego Bay, is reached from San Diego Railway Station in 20 min. by an electric car (5 c.) and ferry (5 c.), connecting with an electric car leading to the hotel (5 c.; hotel-automobiles from the station to the hotel 50 c., incl. ferry and hand-baggage). Coronado Beach, about 12 M. in length, consists of a narrow tongue of sand, running to the N. from the mainland and ending in the expansions known as the *South* and *North Beach*, each about 1½ M. square. The latter, opposite Point Loma (p. 540), forms the S. horn of the entrance to San Diego Bay and is still mainly a waste of sand and chaparral, kept as a game preserve (of rabbits and quail chiefly) for the guests of the hotel. The South Beach, on the other hand, has been partly laid out as a city and contains several hundred cottages, fine trees, beautiful gardens, a Japanese cottage and tea-garden (adm., including tea and cake, 25 c.), golf-links with club-house, and other attractions. Its permanent population is about 1500. The University of California (p. 466) has a marine biological station on this beach. The ***Hotel del Coronado** (from $ 4, summer and pension rates less) is one of the largest, finest, and most comfortable hotels in California, and is delightfully situated close to the ocean and an excellent sandy beach. Adjacent are bathing-tanks of salt-water, for summer and winter use, while steam-yachts, launches, and boats afford opportunity for excursions by water.

Flowers thrive wonderfully on Coronado Beach, and the flower-beds adjoining the hotel are of astonishing brilliancy. The tower of the hotel commands a splendid *View.

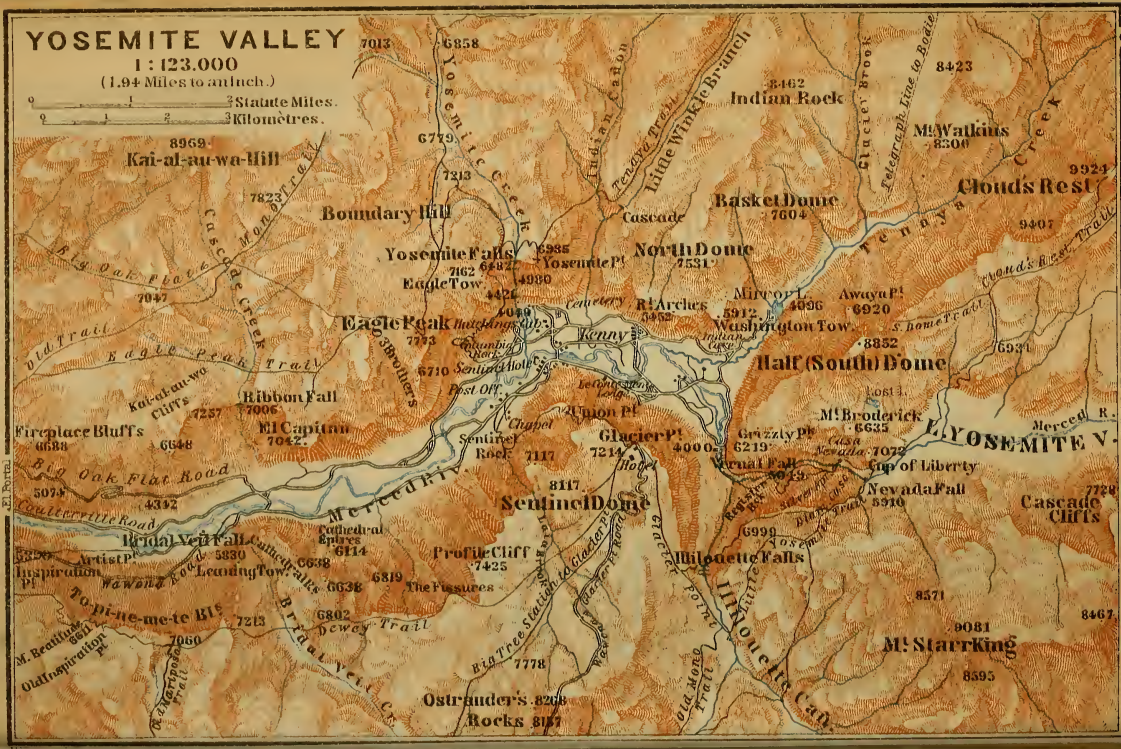
The Climate of Coronado Beach is mild and equable (mean winter temp. 56°, spring 59°, summer 68°, autumn 65°). The daily range is singularly small, the difference between the lowest and the highest mean temperature of the 24 hrs. amounting in some years to only 10°. The average annual rainfall is ten inches, and the average number of rainy days is less than fifty.

Among the points of interest on South Beach are the *Ostrich Farm* (adm. 25 c.) and the beautiful **Botanical Gardens* (2/3 M. from the Hotel; station on the electric line to the ferry). Near the hotel is a *Tent City* (open May-Oct.), under the same management, consisting of 1200 tents furnished as hotel-bedrooms, with hot and cold water, electric light, a theatre, a restaurant, shops, and reading and concert rooms. Expenses may be comfortably limited here to $ 2 daily. — An excursion should be made to *Point Loma* (*View), the N. horn of the entrance to San Diego Bay, reached by boat to *Ballast Point* (2 M. below the view-point) or by carriage from San Diego. The uppermost of the two lighthouses here, 500 ft. above the sea, is said to be the most loftily-situated lighthouse in the world (now disused). About midway between the landward end and the extreme point of the headland is the site of a Theosophical Institution of the 'Universal Brotherhood', with its excellent school and 'Homestead Hotel' (from $ 2). — Other excursions may be made to the places mentioned in connection with *San Diego* and *National City*. — Good fishing for mackerel, barraconda, halibut, and bluefish is obtained in the bay or ocean, while quail may be shot on North Beach and wildfowl along the shore.

Beyond San Diego the railway soon reaches its terminus at (132 M.) **National City** (*San Miguel*, $ 2), with 1086 inhab., connected by a steam-motor line with (13 M.) *Tia Juana* ('Teea Hooahna'; Aunt Jane), situated just beyond the Mexican frontier.

86. The Yosemite Valley.

Approaches. The main approach to the Yosemite Valley is viâ *Merced* and *El Portal* (p. 542). The Valley may also be entered viâ *Berenda* and *Raymond* (p. 529) or viâ *Stockton*, *Oakdale*, *Chinese*, and the *Big Oak Flat Road* (see p. 541), but these routes are now seldom used. The picturesque Hetch-Hetchy Valley (p. 547) and the Calaveras Grove (p. 465), though not on any of the recognized Yosemite routes, may be included in the Yosemite trip if the visitor is willing to make the necessary détours. At least one day extra would be required in either case. Circular tickets of any desired character, including transportation only, going and returning by one or diverse routes, or including all necessary expenses at hotels and on the trails while in the Valley, may be obtained during the summer season at the San Francisco office of the *Southern Pacific Railway*. From San Francisco the price of the standard round-trip ticket viâ El Portal, including transportation only, is $ 26.60; the minimum charge for board at the hotels on the way and in the Valley (two days) averages about $ 3-4 per day. Trail expenses in the Valley depend entirely on circumstances, but if animals and guides are used will amount to not less than $ 4 per day. Similar tickets may be procured at Los Angeles ($ 38.40), Sacramento ($ 25.30), and other large towns. In June and July it is advisable to apply for tickets several days in advance, as the stage-accommodation in entering the Valley is limited; and the same precaution should be observed in leaving the Valley. Each pass-


YOSEMITE VALLEY
1 : 123.000
(1.94 Miles to an Inch.)
Statute Miles.
Kilomètres.
Kai-al-au-wa-Hill
Boundary Hill
Yosemite Falls
Eagle Tow.
Eagle Peak
Yosemite Creek
Indian Cañon
Tenaya Trail
Little Winkle Branch
Indian Rock
Glacier Brook
Telegraph Line to Bodie
Mt Watkins
Cloud's Rest
Basket Dome
Cascade
North Dome
Yosemite Pt
Mirror L.
Awaya Pt
Washington Tow.
Half (South) Dome
Cloud's Rest Trail
S. Dome Trail
Tenaya Creek
Big Oak Flat & Mono Trail
Cascade Creek
Old Trail
Eagle Peak Trail
Kai-al-au-wa Cliffs
Ribbon Fall
El Capitan
Fireplace Bluffs
Big Oak Flat Road
Coulterville Road
Merced Riv.
Bridal Veit Fall
Cathedral Spires
Cathedral Rks
Artist Pt
Inspiration Pt
Wawona Road
Leaning Tow.
To-pi-ne-me-te Bls
Bridal Veit Cr.
Dewey Trail
Old Mariposa Trail
M. Beatitude
Old Inspiration Pt
Profile Cliff
The Fissures
Sentinel Rock
Sentinel Hotel
Post Off.
Chapel
Union Pt
Glacier Pt
Hotel
Sentinel Dome
Glacier Point
Big Tree Station to Glacier Pt
Glacier Pt Road
Ostrander's Rocks
Old Mono Trail
Illilouette Falls
Illilouette Cañ.
Mt Broderick
Grizzly Pk
Vernal Fall
Nevada Fall
Cup of Liberty
Cascade Cliffs
L. YOSEMITE V.
Merced R.
Mt Starr King
El Portal

enger is entitled to take 150 lbs. of baggage free on the railway, 50 lbs. on the stage. The charge for excess is $ 1 per cwt.

Travellers approaching the Valley viâ Raymond take the train from San Francisco to (178 M.) *Berenda* (p. 529), where they change for the train to (21 M.) *Raymond* (p. 529). The drive from this point to Yosemite Village (p. 542) is about 70 M. in length, and is broken by a night at Wawona (p. 548). — Those approaching viâ the Stockton and Oakdale route take the train from San Francisco to (92 M.; 4 hrs.) *Stockton* (p. 465) and from Stockton to (32 M.; 1½ hr.) *Oakdale*, proceed by the Sierra Railway to *Chinese*, and go on thence to (ca. 50 M.) the Valley (comp. p. 465).

Travellers who enter viâ El Portal (p. 542) may arrange to visit the Merced and Tuolumne Groves of Big Trees before entering the Valley. The *Merced Grove* is reached by trail (7 M.) or by a wagon road (12 M.). Thence we may proceed viâ (3 M.) *Hazel Green* to (6 M.) the *Tuolumne Big Trees*.

Hotels. The only hotel in the Valley itself (p. 542) affords reasonably comfortable quarters. There are also fair hotels at the stopping-places of the stages on the way into the Valley, and likewise a good inn at Glacier Point (p. 545). Three comfortable camps are now established, where the visitor gets a bed in a tent and substantial food for considerably less than the hotel rates (*Curry's Camp* and *Yosemite Camp*, each $ 2 a day; *Camp Ahwanee*, $ 3).

Season. Plan of Tour. The regular season of travel in the Yosemite begins about April 1st and ends about Nov. 1st, but a winter-visit has also been made entirely practicable by the opening of the railway to El Portal. Perhaps the period from the middle of May to the middle of June is on the whole the best time for a visit, as the roads are then generally free from snow or dust, the temperature is pleasantly warm by day and cool at night, the waterfalls are still full of water, the snow-effects on the mountains are lovely, and the wild-flowers are in profusion. On the other hand some of the trails may still be closed by snow. Later the heat is sometimes great. Campers commonly visit the Valley in June, July, or Aug., and suitable camping-places are set apart for their use. It is possible to see all the points usually visited in about three days, but it is advisable to spend at least a week in the Valley. Those who have time for one trip only should select that to Glacier Point, which gives a view of the Valley itself, the Sierra Nevada, and the Vernal and Nevada Falls. Next in importance come the Falls just named, Eagle Peak and the Yosemite Falls, and Cloud's Rest (this last for the more energetic). No one should fail to see the sunrise reflected in Mirror Lake, a sight which can be included in any of the ordinary daily excursions. The charges for horses, mules, carriages, and guides are fixed by the Superintendent (tariff on application at the hotel). The roads on the floor of the Valley are fair, and the mountain-trails are as a rule excellent bridle-paths, though nervous persons, or those inclined to dizziness, may find some of them rather trying to ride down. In this case, however, it is easy to dismount and go on foot, letting the mule follow. The *Guides* ($ 3) are usually courteous and obliging, but do not compare in intelligence or knowledge of the country with the best Swiss guides. The trails are so unmistakable that their functions are mainly confined to looking after the horses.

Bibliography. The standard work on the Yosemite is the 'Yosemite Guide-book' by *Prof. J. D. Whitney* (published in three sizes, but at present unfortunately out of print). See also *D. J. Foley's* 'Yosemite; Souvenir and Guide' and 'The Yosemite Pathfinder'. Excellent maps of the Yosemite Valley have been published by the U. S. Corps of Engineers (Wheeler Survey) and the Geological Survey of California. Good photographs may be obtained from Taber & Co., the Sunset Photo & Engraving Co., and R. J. Waters, at San Francisco, or from George Fiske, in the Valley itself. — The botanist will find the Yosemite Valley a place of great interest, and the number and variety of its wild flowers are especially remarkable. The singular snow-plant (*Sarcodes sanguinea*), elsewhere rare, is frequently found in or near the Yosemite in May and June. It has the form of a bright scarlet column, 3-12 inches high, and grows on the edge of snow-drifts or in ground recently covered with snow. Good shooting and fishing may also be obtained.

Approach via Merced and El Portal.

According to present time-tables we leave San Francisco by the Southern Pacific Railway at 8.20 a.m. (Santa Fé Railway at 8 a.m.), and proceed to (152 M.) *Merced*, as described at p. 529, arriving at 1.30 p.m. (return-fare to Merced $8.10). There transfer is made to the train of the Yosemite Valley Railroad, which leaves at 2.30 p.m. and reaches (78 M.) El Portal in 4 hrs. (return-fare $18½; excursion rates frequently obtained; extra fare on observation car, 50 c.). The train first runs to the E. through the *San Joaquin Valley* (p. 529) and crosses (17 M.) the *Merced River*. At (24 M.) *Merced Falls* the foothills begin. Abundant evidence of placer mining and of prospecting is seen on both sides of the river. A few miles above Merced Falls we reach the dam and stamp-mill of the *Exchequer Mine*. At (37 M.) *Pleasant Valley* the railway crosses to the S. bank of the Merced. The scenery increases in interest as we penetrate deeper into the foot-hills. A short distance below (48 M.) *Bagby*, with a small stamp-mill and an electric plant, we return to the right bank. About 2 M. farther on we pass *Solomon's Gulch*, from which $2,000,000 of gold dust was taken in the earlier days. The walls of the canyon now grow higher and more precipitous, and after crossing the *North Fork* we reach (55 M.) *The Broadheads*, a great cliff that overhangs the gorge. — 56 M. *Mountain King Mine*, the stamp-mill of which is run by water brought through a flume over 1 M. long.

78 M. **El Portal.** Here the night is spent in the *El Portal Hotel* ($4). The stages leave for the Valley at 7 a.m. The road follows the right bank of the Merced River, and the scenery rapidly increases in grandeur. At places the sides of the valley rise precipitously to nearly 2000 ft. After 1 M. we enter the *National Park*. — 3½ M. *Arch Rock*, formed by two huge boulders under which a passage has been blasted for the road. — In ½ M. more we join the old Coulterville Road. — 5½ M. *Cascades Fall*, 600 ft. high. — 6 M. *Black Spring*, where the horses are watered. At (7 M.) *Bridal Veil Meadows* we obtain our first view of the Valley, with *El Capitan* on the left, and the *Bridal Veil Fall* and *Cathedral Spires* on the right (not so fine as the view from Inspiration Point, p. 548). Opposite El Capitan we cross the Merced and join the road from Wawona (p. 548). — 12½ M. *Yosemite Village* (3980 ft.), with the *Sentinel Hotel* ($3-4) and the office of the Superintendent of the Valley (see p. 543).

The **Yosemite Valley ('full-grown grizzly bear'; pron. 'Yosémity') is a gorge or canyon on the W. slope of the Sierra Nevada, traversed by the *Merced River* and enclosed by rocky and almost vertical walls. The nearly level floor of the valley is 8 M. long and about 3960 ft. above sea-level, while the enclosing walls are 3000-5000 ft. higher. The width between the walls varies from ½ M. to 2 M. At several points huge waterfalls are precipitated over the face of the rocky walls into the valley below. The park-like floor of the valley is

carpeted with fine flower-studded grass and freely sprinkled with beautiful trees and shrubs, while the emerald-green Merced flows through it in alternate reaches of calm and turmoil.

'The principal features of the Yosemite, and those by which it is distinguished from all other known valleys, are: first, the near approach to verticality of its walls; second, their great height, not only absolutely, but as compared with the width of the Valley itself; and finally, the very small amount of *talus* or *débris* at the base of these gigantic cliffs. These are the great characteristics of the Yosemite, throughout its whole length; but, besides these, there are many other striking peculiarities, and features both of sublimity and beauty, which can hardly be surpassed, if equalled, by those of any mountain valleys in the world' *(Whitney)*.

The visitor standing on the floor of the valley sees no outlet in any direction and feels curiously separated from the rest of the world. Perhaps no single valley in Switzerland combines in so limited a space such a wonderful variety of grand and romantic scenery.

The theory advanced by Prof. J. D. Whitney that the formation of the valley was most probably due to a mighty convulsion of nature, caused by the subsidence of a limited area, marked by lines of 'fault' or fissure, crossing each other nearly at right angles, has now been definitely abandoned. The investigations of Prof. Le Conte, Mr. H. W. Turner, and others have conclusively proved that the valley was formed by glacial action and that it is simply a gigantic example of erosion. The geological formations are entirely granitic.

The Yosemite Valley was first seen by white men, so far as is known, in 1851, when a small party of soldiers came upon it suddenly when in pursuit of Indians. The first settlement was made in 1857, and other buildings were soon erected as the attractions of the valley became known and tourists began to crowd in. In 1864 an Act of Congress was passed, handing the valley itself, with the adjacent territory for a distance of about 2 M. all round it, to the State of California for the purposes of a *State Park*. In 1905, however, this park was receded to the Federal Government and it now forms part of the *Yosemite National Park*, created in 1890, which takes in the entire watershed of the rivers of the valley (500,000 acres). This park is under the supervision of the Department of the Interior, and it is policed by two troops of cavalry, encamped near the Yosemite Fall. The Superintendent is Major H. C. Benson, whose office is in the village. About a dozen of the so-called *Digger Indians* (Shoshonians), who originally occupied the valley, still survive. They are of the lowest type of red men, supporting themselves partly on roots and acorns and partly by fishing (comp. 'Indians of the Yosemite Valley', by *Galen Clark*).

Perhaps the most striking object in the valley, to most visitors, is the cliff known as ***El Capitan** (7042 ft.), which rises prominently as the N.W. buttress of the canyon. It is not by any means the highest part of the canyon-walls, though rising to a height of 3000 ft. above the floor of the valley, but produces its effect by its dominating position, its majestic form, the bareness and verticality of its face, and the narrowness of the valley in front of it. It has two faces, one

looking W. and the other S., which join each other almost at right angles. The S. face projects some 60 ft. from the perpendicular into the valley. The summit cannot be reached without a long and arduous journey, which is seldom undertaken. The *Ribbon Fall* or the *Virgin's Tears*, about 2000 ft. high, descends over the cliffs just to the W. of El Capitan. It is a beautiful fall in the early part of the season, but loses most of its water in summer. — To the E. of El Capitan are the fine peaks named the **Three Brothers**, the highest of which, known also as *Eagle Peak* (7773 ft.), is a favourite view-point (see p. 547). — In the recess to the E. of Eagle Peak, near the centre of the valley, are the ****Yosemite Falls**, where the creek of that name descends to the valley in three leaps, with a total height of 2500 ft. The *Upper Fall* has a vertical descent of 1436 ft.; the *Middle Fall* consists of a series of cascades with a total descent of 626 ft.; while the *Lower Fall* is 400 ft. high. This is the highest waterfall in the world with anything like the same body of water. At the top it is about 35 ft. wide. Seen at its best, this fall is certainly one of the grandest features of the valley; but it dwindles considerably as the season advances. A splendid ice-cone, 500 ft. high, forms at the foot of the Upper Fall in winter. Trail to the top, see p. 546. — The projection to the E. of the Yosemite Falls is named **Yosemite Point** (6935 ft.) and commands a splendid view (comp. p. 547). The ravine to the E. of this is known as *Indian Canyon*. The wall of rock on the other side of Indian Canyon is known as the **Royal Arches**, so called from the semicircular cavities on its front. Adjoining these, at the angle formed by the beginning of the Tenaya Canyon (see below), rises the *Washington Tower* or *Column* (5912 ft.), which is itself a cub or spur of the huge *North Dome* (7531 ft.).

We have now, in our survey, reached the head of the Yosemite Valley proper, where it splits into the three narrow canyons of the *Tenaya* to the N., the *Merced* in the middle, and the *Illilouette* to the S. (comp. p. 547). To the S. of the Tenaya Canyon, opposite the N. Dome and forming the E. terminus of the Yosemite Valley, rises the singularly shaped ****Half or South Dome** (8852 ft.), which disputes with El Capitan the place of the most remarkable single feature of the valley. 'It strikes even the most casual observer as a new revelation in mountain forms; its existence would be considered an impossibility if it were not there before us in all its reality; it is a unique thing in mountain scenery, and nothing even approaching it can be found except in the Sierra Nevada' *(Whitney)*. The Half Dome was first ascended in 1875 by a man named Anderson, who scaled the summit on the S.E. side by means of a rope attached to pegs driven into the rock. Anderson's ladder has, however, been allowed to go to ruin, and at present the top of the Half Dome is inaccessible. — To the S.W. of the Half Dome, at the angle formed by the Tenaya and Merced Canyons, rises *Grizzly Peak* (6219 ft.), a grim, wooded, and nearly inaccessible summit.

Passing over the Merced Canyon, which enshrines the *Vernal* and *Nevada Waterfalls* (see p. 546), we now come to the S. wall of the Yosemite Valley, the first (easternmost) peak of which is **Glacier Point (7214 ft.), the most frequently visited, and in many respects the finest, of the points of vantage from which to view the valley. A description of the trail to it and the view from it is given below. — For about 1 M. to the W. of Glacier Point the wall of the valley runs nearly in a straight line and is almost wholly covered with talus or débris. Above this, but a little back from the valley, rises the **Sentinel Dome** (8117 ft.), which commands a very extensive view (see p. 546). The front-wall just mentioned ends on the W. in the ***Sentinel Rock** (7117 ft.), the most conspicuous rock on the S. face of the valley. Its ascent is not difficult or dangerous for climbers. — Next in order, as we proceed towards the W., come the slender *Cathedral Spires* (6114 ft.), adjoined by the imposing ***Cathedral Rocks** (6638 ft.), opposite El Capitan. Over the W. side of the lower part of these rocks pours the ***Bridal Veil Fall**, which some visitors deem the finest in the valley. It has a clear vertical fall of about 630 ft., with a width of 50-70 ft. The name is derived from the effect on it by the wind, which often makes it flutter like a white veil. Like most of the other falls, it loses much of its grandeur as the summer advances. A fine rainbow is generally visible on this fall between 4 and 5 p.m.

The above enumeration includes most of the principal points in the valley itself or in its immediate walls. Below follows a short description of the routes leading to these as well as to other points not included in the valley itself but generally visited thence. The hotel (p. 542) is taken as starting-point. For information as to horses, guides, and so on, comp. p. 541. The prices given below are for members of parties including at least four persons.

(1.) The *Lower Round Drive (16 M.), on the floor of the valley (fare $ 2 each), gives a very good general idea of the Yosemite wonders. The points visited include the foot of the *Yosemite* and *Bridal Veil Falls* (see p. 544 and above), and it is well to time the drive so as to see the afternoon rainbow on the latter (see above). — To *Bridal Veil Falls* and *Inspiration Point*, $ 2½. — The *Cascade Falls* are about 5½ M. below the Bridal Veil Fall, beyond the limits of the valley proper. — *Mirror Lake* (see p. 547) is 3 M. to the N.E. of the hotel (fare $ 1).

(2.) Glacier Point (5½ M.; horse $ 3). The Glacier Point trail (well-made but somewhat trying on horseback for those liable to giddiness, esp. in descending; quite safe and not very steep for walking) begins near the foot of Sentinel Rock, not far from the hotel. The trail ascends the steep face of the cliff in zigzags. *Union Point* (6314 ft.), about two-thirds of the way up, commands a fine view. Close by is the singular *Agassiz Column*. **Glacier Point (7214 ft.), marked by a flagstaff, where an iron rail has been fixed between two rocks, commands a splendid view of most of the valley, the floor of which lies almost perfectly sheer below us. A little way from the edge of the cliff is the small and unpretending, but fairly comfortable *Glacier Point Hotel* ($ 4, meal $ 1; Camp $ 2, meal 50 c.), the porch of which commands a magnificent **View of the Merced Canyon, with the Vernal and Nevada Falls and the Cap of Liberty, the Half Dome, and the *High Sierra*, including (named from right to left) Mt. Starr King,

Red Mt., Gray Mt., Mt. Clark, Mt. Florence, Mt. McClure, Tenaya Peak, and Mt. Lyell (p. 548). Nearly every evening a fine display of fireworks (announced by a horn) is given here by throwing burning brands, etc., over the cliff (well seen from below). — Glacier Point is accessible, for those who can neither ride nor walk up the trail, by carriage-road from *Chinquapin* (see p. 548), but this roundabout journey takes about a day (5½ hrs. each way) instead of 4-5 hrs. It may also be reached via *Nevada Fall* (see below), and those who spend the night here may return by this route. Many visitors now ascend from the Sentinel Hotel to Glacier Point and drive thence to (18 M.; 5½ hrs.) Wawona (p. 548). — The top of Sentinel Dome (p. 545) is about 1¼ M. from Glacier Point and is easily reached thence on foot or horseback (no extra charge). From Sentinel Dome the excursion may be extended to (2 M.) the so-called *Fissures*. To Glacier Point, Sentinel Dome, and the Fissures, $ 3½. From the Fissures we can continue by the Pohows Trail along the S. rim of the valley, crossing the Bridal Veil Creek, to (8½ M.) *Fort Monroe*, on the Wawona road (Glacier Point to Fort Monroe $ 4).

(3.) **Vernal and Nevada Falls (5½ M.; horse $ 2½). About 2 M. from the hotel a trail diverges to the *Happy Isles*, charmingly situated in the river. The excellent *Anderson Trail*, which as far as Vernal Fall is so broad and easy as to give no cause for nervousness, begins about 2¼ M. to the S.E. of the Sentinel Ho., opposite the electric light plant, and winds along the flank of *Grizzly Peak* (p. 544), with the beautiful *Merced River* rushing downwards on the right. A good distant view is obtained (right) of the *Illilouette Falls* (p. 547). About ¼ M. below the Vernal Fall we cross the river by a bridge (4443 ft.), which commands one of the best views of it. Five minutes beyond the bridge is the so-called *Register Rock*, where the trail forks, the left branch leading to the flat *Lady Franklin Rock*, near the foot of the Vernal Fall. The (2 M.) *Vernal Fall (5049 ft.) has a vertical descent of 350 ft., with a width of 70-80 ft. Behind rises the picturesque *Cap of Liberty* (7072 ft.). This may be ascended by experts, but it is a difficult climb. We may now ascend to the top of the fall by an easy path protected by an iron chain. From Register Rock (see above) the trail (now narrower and steeper) makes a wide sweep to the right before reaching the top of Vernal Fall, where the flat rock, with a natural parapet, permits an approach to the verge of the water. Just above is the beautiful *Emerald Pool*. The trail recrosses the river about halfway between the top of the Vernal Fall and the bottom of the Nevada Fall. Above the bridge is the *Diamond Cascade* and below it is the *Silver Apron*. We soon obtain a fine view of the (3¾ M.) superb **Nevada Fall (5910 ft.), which has a slightly sloping descent of about 600 ft. and ranks with the Yosemite Falls. — Many visitors turn at the foot of the Nevada Fall, but those who have time and strength should certainly follow the steep and zigzag trail to (¾ M.) its top.

The trail to the *Little Yosemite* and *Cloud's Rest* (see p. 547) diverges to the left before we reach the bridge above the falls.

Beyond the bridge the trail goes on, along the flank of *Mt. Starr King* (9081 ft.), to (6 M.; 11½ M. from the hotel; horse $ 4) Glacier Point (p. 545); and this route is recommended to those who have time. The night may be spent at Glacier Point Hotel (p. 545). This trail crosses the *Illilouette* just above the falls (see p. 547).

(4.) *Eagle Peak and Yosemite Falls (6-6½ M.; horse $ 3). To reach Eagle Peak trail, a steep but well-made bridle-path (not so dizzy as the Glacier Point trail), we cross the bridge behind the Sentinel Hotel (p. 542), turn to the left a little farther on, and cross the bridge over the creek descending from the Yosemite Fall. The trail diverges to the right about ¼ M. beyond the last-named bridge, ascends round and up the ledges adjoining the Falls canyon, and then descends to (1½ hr.) a hitching-place near the foot of the **Upper Yosemite Fall (see p. 544). We clamber over the rocks and approach as near the fall as we care to penetrate through the clouds of spray, gaining an overwhelming impression of the stupendous power and volume of this marvellous waterfall. Continuing to follow the

trail, we keep to the left, where a path to the right diverges to the top of the Yosemite Fall and again to the left at the next fork, where the path to the right leads to Lake Tenaya (comp. p. 548). The *View from Eagle Peak (p. 544) extends farther to the W. than that from Glacier Point and includes some peaks of the High Sierra. — If time allows, a visit to the top of the Yosemite Fall (p. 546) should certainly be combined with this trip. The *View of the fall from above is as impressive in its way as that from below. A large boulder about 12 yds. below the bridge above the fall, on the left (E.) side of the stream, shakes or rather jerks perceptibly at irregular intervals, as may be felt by leaning against it. This movement is probably caused by the water of the fall entering some cavern far below. The trail crossing the bridge mentioned at p. 546 leads to *Yosemite Point* (p. 544), protected by an iron railing, which commands a view similar to that from Eagle Point. If time and strength do not allow a visit to both, the top of the Yosemite Falls and Yosemite Point should be preferred to Eagle Peak.

(5.) *Mirror Lake (carr. $ 1), a small piece of water, about 3 M. to the N.E. of the Sentinel Hotel, at the mouth of the Tenaya Canyon, is visitet-for its wonderful reflections of the North and South Domes and Mt. Wad kins. Its surface is generally most unruffled early in the morning, and visitor-usually go to see the sun rise in it over the Half Dome (about 8 a.m. in sums mer). The reflections are also good by moonlight.

(6.) Cloud's Rest (10 M.; horse $ 5). This excursion is one in high favour among the more energetic visitors to the valley. It is accomplished in one day (12 hrs.). The trail is good and not difficult, but the upper part of it is apt to be buried in snow in the early part of the season. — From the hotel to the point where the trail diverges from that to the top of the Nevada Fall, see p. 546. A little farther on the trail to the so-called *Little Yosemite* (6000 ft.) diverges to the right. Cloud's Rest (9924 ft.) commands a splendid *View of the walls of the Yosemite Valley and of the High Sierra. Immediately to the S.W. is the Half Dome; to the N., across the Tenaya Canyon, rises Mt. Watkins (see below). Among the most prominent peaks of the Sierra (named from N. to S.) are Mt. Hoffman, Tenaya Peak (with Tenaya Lake below it), the Cathedral, Mt. Dana, Mt. Gibbs, Mt. Lyell, Mt. Clark, and Mt. Starr King (see p. 546).

(7.) Falls of the Illilouette (2½ M.). The falls of the Illilouette may be reached by a somewhat rough scramble up the canyon of the Illilouette, opening to the S. of the Merced Canyon (comp. p. 544). The total height is about 600 ft.; the main fall is 400 ft. high. They are also passed on the trail from Nevada Fall to Glacier Point (see p. 546). Most visitors will content themselves with the distant view from the Vernal Fall trail (see p. 546). A good echo is returned from *Echo Wall*, in the Illilouette Canyon.

(8.) Mt. Watkins (8300 ft.) rises on the N. side of the Tenaya Canyon and is sometimes ascended from the N.

Among the longer excursions in the High Sierra, which can be made by those who prolong their stay in the Yosemite Valley, are those named below. Guides are necessary in all cases, and a little experience in mountain-climbing is desirable for some of the ascents. Rough accommodation for the night can sometimes be procured, but in other cases camping out is necessary. — About 12 M. to the N. of Yosemite is the *Canyon of the Tuólumne (four syllables), a stream which, in this part of its course, runs nearly parallel with the Merced and is very attractive from the beauty and variety of its waterfalls and the grandeur of its overhanging cliffs. The upper part of the canyon can be easily reached on horseback by the *Virginia Creek Trail*, which leaves the trail to Mono Lake at Lake Tenaya (p. 548) and soon brings us to the first and uppermost of three picturesque groups of cascades, with a total descent of 2000 ft. within 1½ M. (comp. p. 544). About 20 M. lower down is the *Hetch-Hetchy (3700 ft.), a remarkable counterpart of the Yosemite, on a somewhat smaller scale, but closely resembling it in its main features, with similar high cliffs and fine waterfalls. It cannot easily be reached by descending the canyon, but is

approached by the *Tioga Road*, running N. from *Crocker's Station* on the *Big Oak Flat Road* (comp. p. 540). From Crocker's to (56 M.) the *Hetch-Hetchy* a stage runs during June, July, and August; saddle-horses and vehicles can be hired at Crocker's. Those who make this trip must provide their own food and camp-accommodation. From the Hetch-Hetchy Valley easy side-trips may be made to (11 M.) *Lake Eleanor*, to (5 M.) *Till-Till Valley*, and thence to (6 M.) *Lake Vernon* and (11 M.) *Ranchesia Mt.* In the Hetch-Hetchy Valley exceptionally good fishing may be found. **Lake Tenaya**, 18 M. to the N.E. of the Sentinel Hotel, viâ the Eagle Peak trail (comp. p. 546), and reached also from Crocker's (see above), lies near the head of the Tenaya Canyon, in the midst of a grand mountain amphitheatre. *Tenaya Peak*, on its E. side, may be ascended with little difficulty. Beyond this lake the trail (to the left the Virginia Creek trail, see p. 547) goes on to the (8 M.) Tuólumne Meadows (8500 ft.), at the head of the Tuólumne Canyon (p. 547). The scenery here is very fine. Near the head of the Meadows are the (8 M.) *Soda Springs*, a favourite camping-ground for those making the ascent of Mt. Dana or Mt. Lyell (see below). The trail goes on to (20 M.) *Mono Lake*. — **Mt. Dana** (12,992 ft.; there and back, 4 days), commands a very extensive view and is generally ascended from Soda Springs (see above; no particular difficulty). — **Mt. Lyell** (13,090 ft.) is more difficult and should not be attempted except by experts (3-4 days). It is also ascended from Soda Springs. — **Mt. Hoffmann** (10,921 ft.; *View) may be ascended from Tenaya Lake in half-a-day. — Visitors to the *Little Yosemite* (p. 547) may go through the gorge at its head, passing the *Silver Chain Cascade*, to the *Lost Valley* (there and back in one day).

Wawona and the Mariposa Grove of Big Trees, which were formerly visited by travellers entering the Valley viâ Berenda and Raymond, are now usually made the object of an excursion from the Sentinel Hotel or Glacier Point (see p. 545; round trip in $1^1/_2$ day, stage-fare $ 15). — From Yosemite Village to (4 M.) **Bridal Veil Fall*, see pp. 544, 545. We now ascend a winding road, with rapid turns, 'hair-pin' bends, and glorious retrospects of the Valley (e.g. at *Artist's Point*, 4700 ft.). About 4 M. beyond Bridal Veil Fall we reach ****Inspiration Point** (5390 ft.), which commands a superb view of the Valley, with El Capitan to the left, Cathedral Spires and Sentinel Dome to the right, and the Half Dome and North Dome in the background. The timber along the road is striking, including sugar-pines (*Pinus Lambertiana*), yellow pines (*Pinus ponderosa*), silver firs (*Abies magnifica*), cedars (*Libocedrus decurrens*) and oaks, besides pretty blossoming trees like the dogwood (*Cornus Florida*), buckeye (*Aesculus Californica*), and California lilac (*Ceanothus integerrimus*). The curiously twisted and red-trunked manzanita (*Arctostaphylos glauca*) is also abundant. — Near (13 M.) *Chinquapin Station*, 5 M. from Inspiration Point, our road is joined by the direct road from *Glacier Point* (see p. 545). The road now ascends rapidly, commanding a series of fine views, and finally attains an elevation of 6500 ft. The descent is equally rapid.

26 M. **Wawona** or **Big Tree Station** (4095 ft.; *Hotel*, $ $3^1/_2$-$4^1/_2$) is beautifully situated on the S. fork of the *Merced River* (p. 542) and forms pleasant headquarters for a prolonged stay. The principal point of interest in the vicinity is the *Mariposa Grove of Big Trees*, 8 M. to the S.W.

The *Mariposa Grove of Big Trees (6500 ft.), so called from its situation in Mariposa ('butterfly') county, occupies a tract of land, 4 sq. M. in area, reserved as a State Park, and consists of two distinct groves, ½ M. apart. The *Lower Grove*, which we reach first, contains about 240 fine specimens of the *Sequoia gigantea* (see p. 465), including the 'Grizzly Giant', the largest of all, with a circumference of 94 ft. and a diameter of 31 ft. Its main limb, 200 ft. from the ground, is 6½ ft in diameter. In ascending to the *Upper Grove*, which contains 360 big trees, the road goes through a tunnel, 10 ft. high and 9½ ft. wide (at the bottom), cut directly through the heart of a living Sequoia, 27 ft. in diameter. The road passes close to nearly all the largest trees in the Grove, the names and dimensions of which will be supplied by the driver. About 10 of the trees exceed 250 ft. in height (highest 272 ft.) and about 20 trees have a circumference of over 60 ft., three of these being over 90 ft. The Calaveras Grove (p. 465) has taller trees than any in the Mariposa Grove, but the latter has those of greatest circumference. Many of the oldest trees have been marred and reduced in size by fire. The wood of the *Sequoia gigantea*, like that of the *Sequoia sempervirens* (redwood; comp. p. 520), is easily worked, durable, and susceptible of a high polish. Small articles made of it may be bought at the pavilion in the Upper Grove.

To the W. of the Wawona Hotel rises *Signal Peak* (7860 ft.), the top of which (7 M.) may be reached by a good road. The *View embraces the San Joaquin Valley (p. 529) and innumerable peaks of the Sierra Nevada. — The *Chilhualna Falls* (a cascade of 2000 ft.), 2 M. to the N.E., are reached by a good bridle-path and will repay a visit. The *California State Fish Hatchery* is also interesting.

Good fishing is obtainable round Wawona.

Beyond Wawona the road goes on to (20 M.) *Ahwanee* (Hotel, $ 3, R. $ 1) and (40 M.) *Berenda* (p. 529).

87. From San Francisco to El Paso.

1295 M. Southern Pacific Railway ('Sunset Route') in 46-48 hrs. (fare $ 40; 30-day ticket, with 'stop-over' privileges, $ 45; sleeper $ 7, tourist car $ 3.50). Through-trains run by this route to New Orleans in about 4 days (fares $ 57.50, 2nd cl. $ 47.50; 1st cl. 30-day ticket, with 'stop-over' privileges, $ 67.50). Comp. R. 95.

From *San Francisco* to (484 M.) *Los Angeles*, see R. 82b.

Beyond Los Angeles the train runs to the E. through the fruitful *San Gabriel Valley* (p. 536). From (489 M.) *Shorb* or *Dolgeville* (465 ft.) branch-lines diverge to (5 M.) *Pasadena* (p. 536) and to (12 M.) *Monrovia* (p. 486) and (14 M.) *Duarte*. — 494 M. *San Gabriel* (415 ft.; Hotel San Gabriel, known as 'The Grape Vine', with a huge trellised vine, 100 years old, in its garden) is the site of the interesting **Mission de San Gabriel Arcangel**, founded in 1771. The *Mission Church*, erected in 1804 with material imported from Spain, is seen to the left, just before we enter the station. The old Mission gardens and vineyards deserve a visit. *Pasadena* (p. 536) lies about 3 M. to the N.W. To the N. and E. is the *Sierra Madre Range* (p. 536). — At (499 M.) *Bassett* (295 ft.) a loop-line diverges to *Covina*, rejoining the main line at Pomona. — 517 M. *Pomona* (860 ft.; The Palomares, $ 2½), with 5526 inhab., is one of the prettiest and most prosperous of the fruit-growing towns in the *San Bernardino Valley* (p. 486). Large crops of alfalfa (six yearly) and beetroot are also raised here. A little to the S.E. is

the admirable Experimental Station of the University of California. — 524 M. *Ontario* (985 ft.; Ontario, $2^1/_2$), a brisk little fruit-growing town with 2600 inhab., lies in the midst of a striking landscape, with the four highest mountains of S. California in sight (Mt. St. Bernardino and Grayback to the E., San Jacinto to the S.E., and Mt. San Antonio or Old Baldy to the N.; also all visible from many other points). It is connected with ($2^1/_2$ M.) *Upland* (p. 486) by the beautiful **Euclid Avenue*, planted with eucalyptus and pepper trees and traversed by an electric tramway. A branch-line runs to *Chino*, with a large beet-sugar factory. — 527 M. *Cucamonga.*

540 M. **Colton** (980 ft.; *Trans-Continental Hotel*, $1^1/_2$-3; *The Andrews*, $2^1/_2$-3), a town of 1285 inhab., is of importance as the junction of lines to *San Bernardino* (p. 485), on the N., and *San Diego* (p. 538), on the S. It grows large quantities of fruits and is widely known for its excellent black and white marble.

We now ascend rapidly towards the ridge of the *San Bernardino Mts.*, which we cross, at (563 M.) *Beaumont*, by the *San Gorgonio Pass* (2560 ft.). On the other side we descend as rapidly towards the Colorado Desert. To the right are the striking *San Jacinto Mts.* (highest summit 10,805 ft.), to the left the San Bernardino Range.

The **Colorado Desert**, which we now traverse for about 150 M., is a barren sandy wilderness, a great part of which actually lies below sea-level (see below). Almost nothing grows on it except cactus and yuccas. The Gulf of California would seem to have extended to the vicinity of the San Gorgonio Pass and when it receded left a large inland sea of salt-water ('Lake Cahuilla'), which finally dried up, leaving large deposits of salt near Salton (see below). — 569 M. *Banning* (2320 ft.); 575 M. *Cabazon* (1780 ft.); 583 M. *White Water* (1230 ft.). The so-called 'Hog Wallows' of this district are oblong mounds, a foot or two above the general level, produced by wind and drifting sand. — About 7 M. to the S.W. of (589 M.) *Palm Springs* (685 ft.) lies *Palm Valley* (Hotel, $2), at the E. base of Mt. San Jacinto, with the only natural grove of date-palms in California and a curious hot sand-spring. It is now frequented to some extent as a health-resort (as it was, by another race, long before the Spaniards found it in 1537), and fruit-growing is also carried on. — 612 M. *Indio* (Southern Pacific Hotel, $2), also frequented by consumptive patients, is an attractive place, with fine palms and cottonwood trees. The tract between here and Yuma is a desolate desert, hot even in mid-winter. At Indio we are about 15 ft. below the level of the sea, and at (637 M.) *Salton* we reach a depth of 263 ft. below sea-level.

In 1891 a lake, 30 M. long, 10 M. wide, and 4 ft. deep, was created near Salton by the Colorado River, and in 1906 a still larger lake was formed in the same way, the country thus partly reverting for a time to the physical conditions mentioned above. By dint of great expenditure and engineering ability the river has, however, been again brought under control, and works have been constructed which will, it is hoped, prevent repetitions of the inundation. It is estimated that it will take 10 years for the ake ('Salton Sea') to dry up by evaporation.

From (666 M.) *Imperial Junction* a branch-line runs to the S. to (27 M.) *Imperial*, an oasis made by irrigation, and to (92 M.) *Tecolote*. At (671 M.) *Flowing Well* we are again 10 ft. above sea-level. 683 M. *Mammoth*. — About 47 M. farther on we cross the *Colorado River*, and enter *Arizona* (p. 480).

731 M. **Yuma** (140 ft.; *Southern Pacific Hotel*, with *Rail. Restaurant*, $2½; *Gandolfo*, R. from $1), with 4125 inhab., one of the hottest places in the country, was established by the Spanish missionaries in 1700 and lies on the Colorado just below its confluence with the *Gila* ('Heela'). The Mexican frontier is only 7 M. to the S. The *Yuma Indians*, specimens of whom sell bows and arrows, etc., at the railway-station, have a reservation adjoining the Colorado. About 12 M. above Yuma is the great *Laguna Dam* (4780 ft. long), which confines the waters of the Colorado so as to form a lake 10 M. long.

The train now follows the course of the Gila (left) through an arid and unattractive district. Cacti are abundant, including many specimens of the giant cactus *(Cereus giganteus; Mex. sahuaro)*, often 40 ft. high and 'looking like a Corinthian column surmounted by candelabra'. Mirages are often seen in crossing Arizona by this route. To the left rise the *Castle Dome Mts.*, to the right the *Gila Range*. Farther on other mountains are seen on both sides and vegetation appears sparsely, the desolation being relieved by the wonderful colouring and curious rock-formation. The sunrises and sunsets here are worth seeing. The line gradually ascends from Yuma, affording views of the Gila river at intervals. 854 M. *Gila Bend* (730 ft.; The Kindall); 875 M. *Estrella* (1510 ft.). — From (896 M.) *Maricopa* (1165 ft.) a branch-line runs to the N. to (35 M.) **Phœnix** (*Adams Ho.*, from $3, R. from $1; *Commercial Hotel; Ford*, R. from $1), the capital of Arizona, a well-built, modern city of 5544 inhab., in the well-irrigated and amazingly fertile *Salt River Valley*. The remains of several prehistoric towns have been found in the vicinity (comp. p. lxii).

From Phœnix a branch-line runs to (96 M.; 3¾ hrs.) *Winkelman*, on the Gila River. — From Phœnix to *Ash Fork*, see p. 483. — Perhaps the most impressive feature of the huge irrigation works near Phœnix is the *Roosevelt Dam*, 286 ft. high and 800 ft. long at the top (1908). It will create an artificial lake, 25 M. long and 2 M. wide (comp. p. 101), affording irrigation for a district of 250,000 acres.

About 16 M. to the N. (2 hrs. by stage) of (917 M.) *Casa Grande* (1385 ft.; Casa Grande, Woods Ho., $2½) are the interesting remains of the pueblo of *Casa Grande* or *Chichitilaca*, with enormous adobé walls (comp. p. lxiii). — We continue to ascend steadily.

983 M. **Tucson** (pron. 'Toosohn'; 2390 ft.; *Santa Rita*, $5; *San Augustin*, from $2½; *The Heidel*, *Windsor*, R. from $1), a quaint old Spanish-looking place with 7531 inhab., is the largest city of Arizona and carries on a considerable trade with Mexico. Copper, cattle, and the railroad shops are its chief sources of wealth.

Tucson contains the *University of Arizona* (215 students), an *Indian School*, and an interesting *Desert Botanical Laboratory* in connection with the Carnegie Institution (p. 222). In its vicinity is a *U. S. Agricultural Station* for experimental work. About 9 M. to the S. is the old mission-church of *St. Xavier del Bac*, founded at the close of the 17th century (since when, it is said, service in it has never ceased).

Beyond Tucson the *Santa Rita Mts.* are seen to the right, culminating in *Mt. Wrightson* (10,315 ft.); to the left are the *Santa Catalina Mts.* — Crossing the *San Pedro* river, we reach (1031 M.) *Benson* (3575 ft.), the junction of a branch-line to (348 M.) *Guaymas*, on the W. coast of Mexico (Gulf of California). At (1053 M.) *Dragoon* (4605 ft.) we reach the highest point of this part of the line and begin to descend slightly. 1073 M. *Wilcox* (4155 ft.); 1081 M. *Railroad Pass* (4385 ft.). From (1097 M.) *Bowie* (3750 ft.), a branch-line runs to (35 M.) *Solomonsville* and (124 M.) *Globe*. At (1127 M.) *Stein's Pass* (4350 ft.), in the *Peloncillo Range*, we enter *New Mexico* (p. 493). 1147 M. *Lordsburg* (4235 ft.), the junction of a branch-line to (77 M.) *Morenci* (Hotel, $2-3) and (70 M.) *Clifton* (Central, $2), with their rich copper-mines. — 1207 M. *Deming* (4325 ft.; Depot Hotel, from $3), a place of 1341 inhab., is the junction of the A. T. & S. F. line to *Rincon* (for La Junta, Denver, etc., see p. 479) and also of a short line to (48 M.) *Silver City*. — 1215 M. *Zuñi* (4180 ft.; not to be confused with the pueblo mentioned at p. 479). One mile beyond (1288 M.) *Rogers* we cross the wide and deep valley of the *Rio Grande* (itself here an insignificant stream) by a superb steel bridge, and enter *Texas* ('Lone Star State'), the largest state in the Union (262,290 sq. M.). Texas, besides raising cattle, is rapidly growing in commercial importance, producing cotton, wine, iron, coal, oil, and rice which rivals that of Carolina.

1295 M. **El Paso**, see p. 591.

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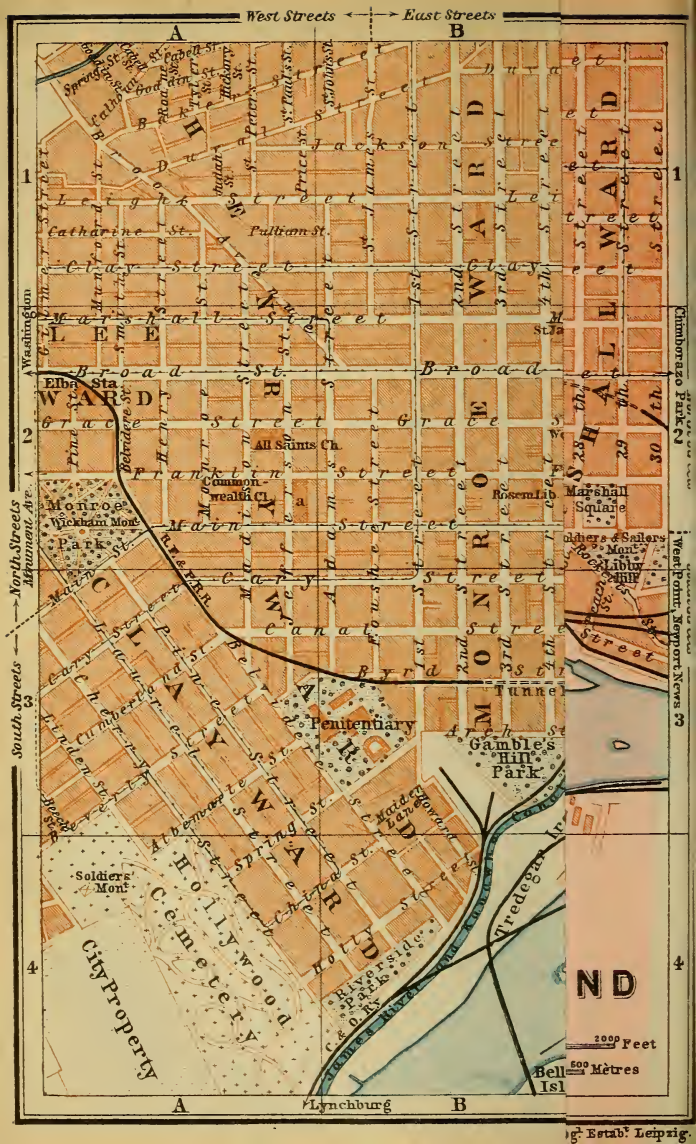
88. From Washington to Richmond.

Comp. Map, p. 156.

116 M. Washington Southern and Richmond, Fredericksburg, & Potomac Railroads in 3½ hrs. (fare $3.50; parlor-car 50 c.). This is part of the Penn. and Atlantic Coast line route to the S. (comp. R. 103a).

Washington, see p. 211. The train crosses the *Potomac*, affording (right) a view of *Arlington House* (p. 227), enters *Virginia* (the 'Old Dominion'), and skirts the right bank of the river to (7 M.) *Alexandria* (p. 228) and (35 M.) *Quantico*. The line now edges

EICHROMO


West Streets
East Streets
A
B
1
2
3
4
Washington
Chimborazo Park
North Streets
Minnesota Ave.
South Streets
West Point, Newport News
Lynchburg
Jackson Street
Leigh Street
Catharine St.
Pulliam St.
Clay Street
Marshall Street
Broad St.
Elba Sta.
Grace Street
Franklin Street
Main Street
Cary Street
Canal Street
Byrd Street
Tunnel
Arch St.
Belvidere St.
Pine St.
Henry St.
Monroe Park
Wickham Mon.
Monroe Ward
Clay Ward
Jackson Ward
Marshall Ward
Broad Ward
Lee Ward
Penitentiary
Gamble's Hill Park
Hollywood Cemetery
Soldiers' Mon.
City Property
Riverside Park
Tredegar Ir.
Bell Isl.
Rosen Lib.
Marshall Square
Soldiers & Sailors Mon.
Libby Hill
Rock Ave.
Peach St.
Street
Maiden Lane
Howard St.
Spring St.
Albemarle St.
Cumberland St.
Cherry St.
Linden St.
Beech St.
Lauren St.
Pine St.
Cary St.
Belvidere St.
China St.
Holly Street
Riverside Park
C. & O. Ry.
James River and Kanawha Canal
R.F. & P.R.R.
Jackson Street
Duval Street
Price St.
St. Paul's St.
St. John's St.
Hickory St.
Peters St.
Cabell St.
Gordon St.
Cathcart St.
Spring St.
Cabell St.
Roane St.
Tyler St.
Hulah St.
Gilmer St.
Munford St.
Smith St.
Henry St.
Adams St.
Madison St.
Fourth St.
Fifth St.
Sixth St.
Pine St.
Belvidere St.
Main St.
Cary St.
Canal St.
Byrd St.
Arch St.
Tunnel
Rosen Lib.
Marshall Square
Soldiers & Sailors Mon.
Libby Hill
Rock Ave.
Peach St.
Street
Maiden Lane
Howard St.
Spring St.
Albemarle St.
Cumberland St.
Cherry St.
Linden St.
Beech St.
Lauren St.
Pine St.
Cary St.
Belvidere St.
China St.
Holly Street
Riverside Park
C. & O. Ry.
Tredegar Ir.
Bell Isl.
ND
2000 Feet
500 Mètres
Estab. Leipzig.

away from the river and skirts the '*Wilderness*', a barren and unattractive district widely known from the terrible struggles of the Civil War that took place here in 1863-64 (p. xli).

54 M. **Fredericksburg** (*Exchange Hotel*, $2), a quaint old city of 5068 inhab., on the *Rappahannock*, founded in 1727. It was the scene of a hardly-contested battle in 1862, when the Confederates under Lee defeated the Union troops under Burnside. The huge *National Cemetery*, on *Marye's Heights*, contains 15,000 graves, and there is also a large *Confederate Cemetery*.

Those who are concerned with studying the campaigns of the Civil War will find much to occupy their attention in and around Fredericksburg. Carriage $ 1 per hr.; the negro driver will point out the places of interest. The *Battle of Chancellorsville* (May 2nd-4th, 1863), in which 'Stonewall' Jackson was mortally wounded, took place 11 M. to the W., resulting in another repulse to the Union forces, with a loss of 17,000 men. A little to the S. is *Spottsylvania Court House*, the centre of some of Grant's operations in 1864 (p. 559). The 'Battles of the Wilderness' between Grant and Lee were almost continuous during May, 1864; and the losses of the two armies exceeded 60,000. Comp. p. 559.

George Washington spent his boyhood near Fredericksburg. His mother died here in 1789 and is commemorated by a monument.

The train runs towards the S. To the left is a stone pyramid marking *Hamilton's Crossing*, where the Confederates were posted in the battle of Dec. 13th, 1862. At (67 M.) *Guinea* Stonewall Jackson died (see above and p. 566; the small house, with two chimneys at one end, is visible to the left). 92 M. *Doswell.* — *Henry Clay* (1777-1852) was born near (99 M.) *Ashland*, the seat of *Randolph Macon College* (150 students). — 105 M. *Glen Allen* (Forest Lodge), a favourite all-the-year-round resort of the Richmondians.

116 M. **Richmond.** — **Railway Stations.** *Main Street Station* (Pl. D, 2), for the C. & O. and Seaboard Air Line railways; *Southern Depot* (Pl. D, 3), for the Southern Railway; *Byrd Street Station* (Pl. C, 3), for the Atlantic Coast Line and Rich., Fred., & Potomac railways.

Hotels. *The Jefferson (Pl. a; A, 2), Jefferson St., R. from $ 1½; The Richmond (Pl. g; C, 2), Capitol Sq., R. from $ 1½, well spoken of; Murphy's Hotel (Pl. c; C, 2), 801 Broad St., with large annex opposite, R. from $ 1, well spoken of; Lexington (Pl. e; C, D, 2), cor. of 12th and Main Sts., $ 2½-4, R. from $ 1; Ford's (Pl. b; C, 2), Capitol Sq.; Park Hotel (Pl. d; C, 2), R. from $ 1. — *Rueger's Restaurant*, Capitol Sq., cor. 9th and Bank Sts. (Pl. C, 2).

Electric Tramways traverse the chief streets and extend to the suburbs (5 c.; free transfers for intersecting lines). — **Hacks** and **Omnibuses** meet the principal trains; fare into the town 50 c. each.

Steamers ply down the James to Norfolk (fare $ 1½), Old Point Comfort, Newport News, Baltimore, etc.

Post Office (Pl. C, 2), Main St., between 10th & 11th Sts.

Theatres. *Academy of Music; Bijou Theatre.*

Consuls. British, *Mr. Arthur P. Wilmer;* German, *Mr. Emil K. Vietor.*

Richmond (20-200 ft.), the capital of Virginia and one of the most interesting cities of the S., is situated on seven low hills rising from the N. bank of the *James River*. In 1900 it contained 85,050 inhab., while *Manchester*, on the opposite bank of the river, with which it is connected by several bridges, had 9715. The total

estimated population of the city and suburbs in 1907 was 135,000. The city is regularly laid out, and most of the streets running N. and S. are denoted by numbers. Fine water-power is afforded by the James River, which descends 116 ft. in 9 M.

Richmond was founded in 1737, on the site of the home of the famous Indian Chief *Powhatan*, and had still only a few hundred inhabitants when made capital of the State in 1779. At various national crises it was chosen as the meeting-place of important conventions; and in 1861 it became the seat of government for the seceding states. The capture of Richmond became ultimately the chief objective point of the Union troops, and it was defended with great obstinacy by the Confederates, who threw up strong lines of earthworks all round it (comp. p. 559). When finally compelled to evacuate Richmond (April 2nd, 1865; comp. p. 557), the Confederates set fire to the tobacco warehouses and other stores; and a large part of the city was destroyed. All traces of this devastation have been removed and the city is now in a thriving condition, carrying on a brisk trade (tobacco, etc.) and considerable manufactures (machinery, locomotives, flour, ships, etc.; total annual value about $ 50,000,000). About 600,000,000 of the famous Richmond Straight Cut cigarettes are made here annually by the Allen & Ginter Branch of the American Tobacco Co.

The European visitor will probably be struck by the number of *Negroes*, who form one-third of the population and contribute many of its most picturesque and romantic features. Most of the better class of negroes, who have reached a higher level here than in most parts of the S., live in or near First St., to the N. of Leigh St. (Pl. B, 1).

A visit is recommended to the Tobacco Factories, the most characteristic and interesting of the sights of Richmond, where the negroes are engaged in preparing the tobacco for the market and amuse themselves at work by singing the old Plantation melodies, specially adapted to their sweet but entirely untrained voices.

Near the centre of the city, on *Shockoe Hill*, is **Capitol Square** (Pl. C, 2), a tree-shaded area of 12 acres, with many tame grey squirrels. The **Capitol** or **State House** (Pl. C, 2), partly designed after the Maison Carrée at Nîmes, occupies the highest point of the square and dates from 1785. The wings were added in 1906.

Interior (freely open to visitors). In the *Central Hall*, surmounted by a dome, are *Houdon's* *Statue of Washington (which Washington himself is said to have seen in its present position) and a bust of Lafayette by the same artist. The *Senate Chamber*, to the right, was used as the Confederate House of Representatives during the Civil War; it contains a large painting of 'The Storming of Yorktown (1781)', by *Lami*. The *House of Delegates*, to the left, contains portraits of Chatham and Jefferson, and was the scene of Aaron Burr's trial for high-treason (1807; comp. p. 558) and of the State Secession Convention (1861). The platform on the roof affords a fine *View of Richmond, Manchester, the James River, and the battlefields of the vicinity (p. 559).

Capitol Square also contains a fine equestrian **Statue of Washington**, by *Crawford*, with figures of Patrick Henry, George Mason, Thomas Jefferson, Thomas Nelson, Andrew Lewis, and Chief Justice Marshall round the pedestal; a *Statue of Stonewall Jackson* (1824-63), by Foley, 'presented by English gentlemen' (Rt. Hon. A. J. Beresford Hope and others); a *Statue of Hunter Holmes McGuire*, the most noted surgeon of the South; and a *Statue of Henry Clay* (p. 555), by Hart. The curious old *Bell House*, on the W. side of the square, was formerly used by the Public Guard. At the N. E. corner of the square stands the *Governor's Mansion*

(Pl. D, 2).— On the N. side, in Broad St., is the **City Hall** (Pl. C, 2), a handsome Gothic structure with a clock-tower. — To the E. of the Capitol is the **State Library** (Pl. C, D, 2), containing 80,000 vols. and the largest State collection of portraits in the country, including portraits of all the Governors from John Smith to Tyler. — In *St. Paul's Church* (Pl. C, 2), at the corner of 9th St. and Grace St., on the W. side of Capitol Sq., Jefferson Davis was seated when he received a despatch from Gen. Lee, announcing that Richmond must be evacuated (comp. p. 556).

In 12th St., at the corner of Clay St., a little to the N. of Capitol Sq., is the *Jefferson Davis Mansion* (Pl. D, 1), or '*White House of the Confederacy*', occupied by Mr. Jefferson Davis as President of the Southern Confederacy. It is now fitted up as a *Museum of Confederate Relics* (adm. 25 c.). In the rear of the museum is part of the propeller-shaft of the 'Merrimac' (p. 561). [A large and handsome Confederate Memorial Hall, to be called Battle Abbey, is about to be erected in connection with the Museum as a Memorial of the Confederacy.]

Following Broad St. to the E. from Capitol Sq., we pass on the left, near the corner of College St., the *Monumental Church* (Pl. D, 2), erected on the site of the Richmond Theatre, at the burning of which in 1811 Gov. Smith and fifty-nine others lost their lives. Opposite is the *Memorial Hospital* (Pl. D, 2). — About $^3/_4$ M. farther on, at the corner of 24th St. (r.), is **St. John's Church** (Pl. F, 2), erected in 1740, but since much enlarged.

The Virginia Convention was held in this church in 1775, and the pew is pointed out in which Patrick Henry made his famous 'give me liberty or give me death' speech. The verger shows the church and sells photographs, canes made of the sycamore which overshadowed the above-mentioned pew, etc. The graveyard is of some interest.

Twenty-eighth St., $^1/_4$ M. farther on, leads to the right to *Marshall Square*, on *Libby Hill* (Pl. F, 2), embellished with a *Monument to the Private Soldier and Sailor of the Confederacy* (good view).

A little farther out is *Chimborazo Park*. About 1 M. to the N.E. is *Oakwood Cemetery*, where 18,000 Confederate soldiers are interred.

From Libby Hill we may descend to Main St. and follow it to the left, between tobacco warehouses and factories, to 20th St. In 20th St., to the left, at the cor. of Cary St., close to the railway and the canal, is an ice-house which occupies the site of the famous *Libby Prison* (Pl. E, 2, 3), removed to Chicago in 1889. — In Main St. (N. side, near 20th St.) is the *Old Stone House* (Pl. E, 2), the oldest building in Richmond, said to date from 1737. The **Post Office** (Pl. C, 2), between 10th & 11th Sts., to the right, was one of the few buildings in this part of the city that escaped the fire of 1865 (p. 556). — At 7th St. we may diverge to the left to visit the *R. A. Patterson Tobacco Works* (Pl. C, 3), beyond the Byrd St. Station (best time, 10-12 a.m.). At the corner of Main St. and 5th St., to the left, stood (till 1891) the large red brick *Allan House*, in which Edgar Allan Poe spent his boyhood with his foster-father, Mr. John Allan. Fourth St. leads to the left from Main St. to *Gamble's Hill Park* (Pl. B, 3), which commands a *View of the

river, with its numerous falls and islands. Below lie the great *Tredegar Iron Works*, where most of the cannon of the Confederate Government were made. To the N.W. of the park is the *State Penitentiary* (Pl. A, B, 3). Passing the Penitentiary, we come (10 min. more) to the entrance to ***Hollywood Cemetery** (Pl. A, 4).

Near the W. gate of the Cemetery is the *Confederate Monument*, a rude pyramid of stone 90 ft. high, erected as a memorial to the 16,000 Confederate soldiers buried here. On *Presidents' Hill*, in the S.W. corner of the cemetery, overlooking the river, are the graves of *Monroe* (1758-1831) and *Tyler* (1790-1862; no monument), two of the seven Presidents born in Virginia ('Mother of Presidents'). *John Randolph* (1773-1837) of Roanoke, *Jefferson Davis* (d. 1889), *Major-General Pickett* (d. 1875; p. 194), *Gen. J. E. B. Stuart* (1833-64), and *Commodore Maury* (1830-71) are also interred here. A good view is obtained of *Belle Isle*, which was a prison-camp during the war. — To the W. of Hollywood are the *Riverside* and *Mt. Calvary Cemeteries* and (3/4 M.) the *New Reservoir Park*.

In the meantime, however, we leave the cemetery by its W. gate and proceed to the right (tramway), through a poor district, to (1/2 M.) *Park Avenue*, at the beginning of which, in *Monroe Park* (Pl. A, 2), is a *Statue of Gen. Wickham* (1820-88), by Valentine. Three blocks to the W. of this statue is Howitzer Place, containing a *Monument to the Richmond Howitzers*.

From the N.W. corner of Monroe Park we may now follow Monument Avenue (a prolongation of Franklin St., beyond Pl. A, 2) to (1/2 M.) the equestrian ***Statue of General Lee** (1807-70; pp. 193, 559), by *Mercié* (1890). Adjacent is an equestrian statue of *Gen. J. E. B. Stuart* (see above), by Fred. Moynihan (modelled on the Outram statue in Calcutta), and 1/2 M. farther on, at the W. end of the avenue, is the **Jefferson Davis Monument** (by W. C. Noland), consisting of a semicircular colonnade with a pillar supporting an allegorical female figure and inscribed 'Deo Vindice', with a heroic statue of the ex-President (by Valentine) in front. — A little to the E. of the Lee Statue is *Richmond College*, and 1/2-3/4 M. to the W. are the *Exposition Buildings* (in the *State Fair Grounds*) and the *Soldiers' Home*.

We may now return to the centre of the city by *Franklin St.* At the corner of Franklin and 4th Sts. is the *Rosemary Library* (Pl. B, 2), open to the public, founded by Thomas Nelson Page in memory of his first wife. No. 707 Franklin St. was the home of *General Lee* during the War (1861-5) and now contains the collection of the *Virginia Historical Society* (Pl. C, 2). — At the corner of 11th and Clay Sts., near the Davis Mansion (p. 557), is the *Valentine Museum* (Pl. C, 1), containing local antiquities, casts, autographs, engravings, specimens of early printing, drawings, and oil-paintings. In this house, which is a good example of an 'ante bellum' Virginian home, Aaron Burr (p. 556) was entertained during his trial for treason.

Among other points of interest in Richmond are the *Westmoreland Club* (Pl. C, 2), at the cor. of Grace and 6th Sts.; the *Com-*

monwealth Club (Pl. A, 2), at the cor. of Franklin and Madison Sts.; the *Virginia Club*, 2311 East Grace St.; *Chief Justice Marshall's House* (Pl. C, 1, 2); the *Tobacco Exchange*, Shockoe Slip; the *University College of Medicine* (Pl. C, D, 1); the *Medical College of Virginia* (Pl. D, 2); the *National Cemetery*, 2 M. to the N.E. of the city (6540 graves); the *Sheltering Arms Hospital;* and *Idlewood Park*, a favourite summer-resort, close to the city on the W. (car-line).

Battlefields round Richmond. During the last three years of the Civil War (1862-65) battles raged all round Richmond, and remains of the fortified lines constructed to protect the city are visible in various parts of the environs. Both the inner and outer fortifications may be seen from the *Brook Road, which leads to the *Lakeside Club House*, with its golf links, bowling alleys, and boating lake. Probably the best plan for the stranger is to hire a carriage with an intelligent driver and spend a day visiting the scenes of the principal battles. Guides may be obtained at the hotels. An electric tramway (fare 5 c.) runs every 40 min. from the corner of P St. and 29th St. (beyond Pl. E, 1) to (7 M.) *Seven Pines* (see below), where several intrenchments and earthworks may be seen near the terminus of the line (guide usually obtainable here, at the curiosity shop). — The chief direct attack on Richmond was made on May 15th, 1862, when the Union fleet attempted, without success, to force its way past the batteries at *Drewry Bluff*, on the James River, 7 M. below the city (easily visited by steamer, see p. 560). Simultaneously Gen. McClellan advanced with the land-forces up the peninsula between the York and James Rivers and invested Richmond on the E. and N. This led to the hardly-contested but indecisive battle of *Seven Pines* or *Fair Oaks* (May 31st, 1862), in which the Confederates under Gen. Joseph E. Johnston attacked McClellan's left wing, to the S. of the *Chickahominy*. Large cemeteries and a park now mark the spot. The district is swampy, and McClellan lost more men by pestilence than in fighting. Gen. Robert E. Lee now assumed command of the Confederate forces and made an attempt, in combination with Gen. Stonewall Jackson, to overwhelm McClellan's right wing, which was posted at *Mechanicsville*, on the Chickahominy, 5½ M. to the N. of Richmond, and thus began the famous **Seven Days' Battle** (June 26th-July 2nd, 1862). Mechanicsville was followed by the battles of *Gaines Mill*, *Cold Harbor*, *Savage's Station*, *Frazier's Farm*, and *Malvern Hill*. The upshot of this series of contests, in which 40,000 men fell, was the relief of Richmond, as the Union troops were compelled to retreat to Malvern Hill, 15 M. to the S.E., where they repelled the Confederates in their last attack but soon after withdrew to *Harrison's Landing*, on the James River. During 1863 there were no direct attacks on Richmond. In May, 1864, Gen. Ulysses S. Grant came down through the 'Wilderness' (see p. 555), attacked Lee in his entrenched position at Cold Harbor (June 3rd, 1864), and lost 15,000 men without making much impression on the enemy. He then transferred his army to the S. side of the James; and the later stages of the war were rather a siege of *Petersburg* than of Richmond (see p. 564). Gen. Butler captured *Fort Harrison* opposite Drewry Bluff, in Sept., 1864. — *Yellow Tavern*, the place of General J. E. B. Stuart's death, is situated about 5 M. to the N.W. of the city.

From Richmond to West Point and Yorktown, 65 M.; railway to (39 M.) *West Point* in 1¼-2¾ hrs. and steamer thence to (26 M.) *Yorktown* in 1¾ hr. (through-fare $ 1½). The train runs to the E., passing some of the battlefields of the Civil War. Beyond (7 M.) *Fair Oaks* (see above) it crosses the *Chickahominy*. 39 M. *West Point* (Terminal Hotel, $ 2-4), with 1300 inhab., lies at the head of navigation of the *York River*, and we are here transferred to the steamer of the *Chesapeake Steamship Co.* The trip down the river is pretty. The intermediate stops are *Allmonds* and *Clay Bank*. — 65 M. **Yorktown** (*Bayview Ho.*, $ 2-2½; *Yorktown Ho.*, $ 1½-2), on the right bank of the river, 10 M. above its mouth, is memorable for the surrender of the British army under Lord Cornwallis on Oct. 19th, 1781, forming the final scene of the War of Independence. *Moore House*, in which

Lord Cornwallis and Washington drew up the terms of surrender, is 1 M. below Yorktown. Remains of British intrenchments are still visible, and a monument commemorates the surrender. Among the old buildings are the *Nelson House* (where the surrender was signed) and the *Custom House* (the oldest in the country). — From Yorktown the steamer ascends *Chesapeake Bay* to *Baltimore* (p. 202).

From Richmond to *Old Point Comfort*, see R. 89; to *Charleston*, see R. 98; to *Savannah*, see R. 101.

89. From Richmond to Norfolk and Old Point Comfort.

Comp. Map, p. 156.

a. By Steamer.

Steamer down the James River to *Old Point Comfort* and *Norfolk* (120 M.) in 10 hrs. (fare $ 1½). This is a pleasant and interesting trip. The steamers of the *Virginia Navigation Co.* start on Mon., Wed., & Frid. at 7 a.m. and run to Newport News, Old Point Comfort, and Norfolk. Those of the *Old Dominion Co.* leave daily at 7 p.m., connecting at Norfolk with steamers of the same line for New York.

Richmond, see R. 88. The course of the *James River* is very circuitous and the direct distance from Richmond to its mouth is only about 74 M. The water is of a muddy brown colour, telling of the rich tobacco-growing soil through which it flows. Its ancient name was *Powhatan* (comp. p. 556).

Just below Richmond, on the left bank, is the site of Powhatan's home, where Pocahontas is said to have saved the life of Capt. John Smith (see p. 561). *Warwick Park* here is a popular resort. — Farther on, on both banks, are earthworks of the Civil War.

8 M. (r.) **Drewry Bluff** (120 ft.), with remains of the old fortifications (*Fort Darling;* see p. 559). — 8½ M. (l.) *Chaffin Bluff*, behind which lay *Fort Harrison* (p. 559). — 13½ M. *The Dutch Gap Canal*, constructed by Gen. Butler to avoid the Howlett House Batteries, saves a détour of 5½ M. — 14¼ M. (l.) *Varina* was the home of Pocahontas and her husband John Rolfe. — 15¼ M. *Meadowville* (r.), with rich marshland reclaimed by dykes and pumping. — 20 M. *Curle's Neck* (l.), with a fine modern house in the Colonial style. — 21 M. *Presque Isle* (r.). — 22 M. *Pickett's*, at the foot of *Malvern Hill* (p. 559), on *Turkey Island Bend*. — 29 M. (l.) *Shirley*, a plantation still owned by the *Carters* (here pron. 'Cyarter'), one of the 'F.F.V.' (first families of Virginia). Farther on (right) are the lowlands of *Bermuda Hundred*, where, in Grant's significant phrase, Gen. Butler was 'bottled up'.

31½ M. (r.) **City Point**, at the mouth of the *Appomattox River* (p. 566), with the house of Dr. Epps, the headquarters of Grant, in 1864-65. City Point is 9 M. from *Petersburg* (p. 564; railway) — 37½ M. *Berkeley* (l.), with *Harrison's Landing* (p. 559), was the birthplace of the first *President Harrison* (1773-1841). Opposite is *Jordan's Lighthouse*. — 38¼ M. (l.) *Westover*, the former home of the Byrds and Seldens, is, perhaps, the finest old Colonial mansion

on the James (comp. p. lxxxviii). — 40 M. *Blair's* (r.). — 42 M. *Willcox Landing* (l.), a fishing village, sends sturgeon roe to Russia to be made into caviar. — 44 M. *Weyanoke* (l.). — 46 M. (r.) *Fort Powhatan*, a relic of the war of 1812. — 54 M *Brandon* (r.) and (56 M.) *Claremont* (r.) are good examples of Colonial houses; the latter, made of English bricks, is said to be a reproduction of the royal mansion of the same name near Esher, in England. — Below (59 M.) *Sandy Point* the *Chickahominy* (p. 559) joins the James.

68 M. (l.) **Jamestown**, the earliest English settlement in America, founded in 1607 by Capt. John Smith and Christopher Newport (monument by *S. V. Valentine*). The only remains of the ancient town are the tower of the church (in which Pocahontas was married in 1614; church itself rebuilt in 1907) and a few tombstones. The river here expands into a wide estuary. Fleets of oyster-boats are seen. Williamsburg (p. 562) is 7 M. distant (carr. there and back $4).

69½ M. *Scotland* (r.), the landing for *Surry Court House* and the terminus of the Surry, Sussex, & Southampton Railway.

76 M. *Homewood*, known a few years ago as the uncultivated *Hog Island*, is now a successful agricultural village. — 85½ M. *Fergusson's*.

100 M. **Newport News** (*Warwick*, $2½-5; *Lexington Hotel*, $2-2½; Brit. vice-consul, *Mr. J. Haughton*; Ger., *Mr. Fred. J. Gauntlett*), a flourishing little city, with 19,635 inhab., large grain elevators, coal wharves, shipbuilding yards, and iron-works. An electric tramway runs hence to Hampton and Old Point Comfort (p. 563). — We now enter **Hampton Roads**, one of the best harbours on the Atlantic coast. It was here that the Confederate iron-clad *Virginia* (the old *Merrimac*; comp. p. 557) nearly annihilated the wooden fleet of the Union, until itself disabled by the opportune arrival from New York of the famous turret-ship *Monitor* built by Ericsson (p. 33).

108 M. *Old Point Comfort* and *Fort Monroe*, see p. 563. To the N. (left) opens *Chesapeake Bay* (p. 208). — To reach Norfolk the steamer ascends the *Elizabeth River*, an arm of Chesapeake Bay.

120 M. **Norfolk.** — Monticello Hotel, from $3, R. from $1½, with restaurant on 5th floor, good view; °Lorraine, Lynnhaven, R. from $1½; Fairfax, from $2½, R. from $1; Atlantic, Main St., $2½-4, R. from $1; Neddo, small and good, from $2½, R. from $1; Gladstone, R. from $1.
British Vice-Consul, *Mr. Barton Myers*.

Norfolk, with 46,624 inhab., the second city of Virginia and excelled by Savannah alone among the Atlantic ports to the S. of Chesapeake Bay, was founded in 1682. The staples of its busy export-trade are cotton, coal, oysters, and early fruits and vegetables (strawberries, 'goubers' or pea-nuts, etc.). The city is irregularly laid out but contains some pleasant residence-quarters. *St. Paul's Church*, dating from 1730, was struck by a British cannon-ball in 1776, but the one now resting in the indentation is not the original. The churchyard contains many old gravestones, and in the wall of the church is one from Weyanoke (see above), dated 168⅛.

The grounds of the Jamestown Exposition, held in 1907, lie 4 M. to the N. of Norfolk, on the shores of Hampton Roads. Most of the buildings are still standing and various proposals are afloat for turning them to some permanent use. The *Pine Beach Hotel* (from $2½) stands here.

On the opposite bank of the Elizabeth (ferry; electric car to Navy Yard, 5 c.) lies **Portsmouth** (*Hotel Monroe, Lafayette*, $2), a city of 17,427 inhab., with an excellent harbour. At *Gosport*, the S. end of Portsmouth, is the *Navy Yard* (open 8-5), the most important in the country, with a huge dry-dock and interesting relics of the wars with Spain (1898), China (1900), and Mexico (1846). To the N. is a large *Naval Hospital*. — A branch of the *Seaboard Air Line* runs hence viâ (79 M.) *Weldon* (where it intersects the Atlantic Coast Line, p. 602) to (426 M.) *Norlina* (p. 580).

From Norfolk a short branch-railway (fare 25 c.; station 2 M. from the town) and an electric tramway (hourly; same fare) run to (18 M.) *Virginia Beach* (Arlington, $2½), a seaside-resort on the Atlantic coast, surrounded by pine-forest. — An electric car ('Old Point Comfort Express') leaves Main St. hourly for *Ocean View* (Hotel, $3), connecting with steamer to Old Point Comfort (through-fare 25 c.). — The *Dismal Swamp* (p. 564) may be easily visited from Norfolk. — *Currituck Sound*, 30 M. to the S. of Norfolk, offers splendid wild-fowl shooting. — Steamers ply from Norfolk to *Old Point Comfort* (p. 563; ½ hr; fare 25 c.), *Yorktown* and *West Point* (p. 559), *Richmond*, *New York*, *Baltimore*, *Washington* (see p. 223), etc.

From Norfolk to Altavista, 200 M., *Virginian Railway* (no through-trains at present). The line is being extended to (441 M.) *Deep Water*, in W. Virginia.

b. Viâ Chesapeake & Ohio Railroad.

Railway to (85 M.) *Old Point Comfort* in 2¼ hrs. (fare $2.50). Steam Ferry from (75 M.) *Newport News* to (12 M.) *Norfolk* in 1 hr. (through-fare $2.50).

Richmond, see p. 555. The train runs to the S.E., down the peninsula between the *York River* and the *James River*, a flat region of swamps and pine-forest. We skirt the *Chickahominy Swamp* (p. 559) and cross that river near (18 M.) *Roxbury*. 24 M. *Providence Forge*.

48 M. **Williamsburg** (*Colonial Inn*, from $2½), the ancient capital of Virginia and seat of the Colonial governor, with (1900) 2044 inhab., was the scene of a battle on May 5th, 1862.

The old *College of William and Mary*, chartered in 1693, directly by the Crown, was the earliest college in the United States after Harvard (p. 270) and has been the Alma Mater of 17 governors, 12 cabinet ministers, 1 chief justice, and 3 Presidents of the United States. Some of the buildings have been modernized. The original ones are said to have been built from the plans of Sir Christopher Wren. The library contains many interesting relics. In the quiet 'campus' is an old statue of Lord Botetourt.

The principal street is the Duke of Gloucester St., which extends from the College (see above) to (1 M.) the site of the *Old Colonial Capitol*, the meeting-place of the House of Burgesses. On this street are the old *Court House* (built in 1769 and used continuously since then), the old '*Powder Horn*' (1714), the '*Poor Debtors' Prison*', and the old *Bruton Parish Church*. The last, originally built in 1681-83 but dating in its present form from 1710-17 (restored in 1905-7), contains a Bible given by Edward VII., a lectern given by President Roosevelt, and various old relics. Among the old Colonial residences is that used as headquarters by Washington and Lafayette during the siege of Yorktown (p. 559). — Comp. 'Williamsburg, the Old Colonial Capital', by *L. G. Tyler* (1908), and 'Bruton Parish Church', by *W. A. R. Goodwin* (1908).

75 M. *Newport News* (p. 561). Ferry to Norfolk (p. 561), see above.

1:175000
Statute Miles
Kilometres
Soundings in Metres
Hampton
Phoebus
Salt Creek
Soldier's Home
CHESAPEAKE & OHIO R.R.
CHESAPEAKE BAY
Fort Monroe
Hotel Chamberlin
Old Point Comfort
Ferry
Fort Wool
(Rip Raps)
Newport News
James River
Newport News Point
Ferry
HAMPTON
ROADS
Newport News Middle Ground
Willoughby Spit
Willoughby Bay
Sewall Pt
Pine Beach
Pine Beach Lt
Back Creek
Mason Creek
VIRGINIA
Nansemond Light
Pig Pt
Sewall Point
Tanner Creek
Tanner Cr.
Tanner Pt
Craney I.
Lambert Pt
Norfolk Terminal Ry
Elizabeth River
Belleville
Churchland
West Norfolk
Lovett Pt
Pinner Pt
Atlantic City
NORFOLK
Port Norfolk
Naval Hosp.
Niles
Bruce
Western Branch
Armistead
Portsmouth
Eastern Br.
Berkley
Rodman Heights
Gosport
U.S. Navy Yard
Pea Ridge
Peaks
Southern Br.
SOUTHERN RAILWAY
ATLANTIC COAST LINE R.R.
SEABOARD AIR LINE RY.
NORFOLK & SOUTHERN R.R.
Suffolk
Wagner & Debes' Geogl Estabt Leipzig.

82 M. **Hampton** (*New Augusta Hotel*, from $2½; *Barnes Hotel*, $2) is a pleasant little town with 2764 inhabitants. Close by are a *National Soldiers' Home* (2300 inmates) and the **Normal and Agricultural Institute for Negroes and Indians*, founded by Gen. S. C. Armstrong in 1868.

A visit to the latter is of special interest. The institute is attended by 1300 Negroes and 120 Indians, of whom the former pay part of their expenses by working. The chief aim of the institute is to train teachers for the coloured schools, and in this, as well as in the education of the Indians, its success has been highly satisfactory. Visitors are welcome to the classes, parade (12.15), weekly concert, dinner, etc. (specimens of pupil's work for sale; no academic work on Mon.). Hampton also contains a *National Cemetery* (5000 graves) and the *Church of St. John*, built in 1660 with English bricks (tower modern). It is connected with (3 M.) *Old Point Comfort* by a fine shell road and an electric tramway. Tramway to *Newport News*, see p. 561.

The train now crosses an arm of Hampton Roads and reaches —

85 M. **Old Point Comfort** or **Fort Monroe** (**Hotel Chamberlin* close to the sea, with 470 bedrooms, and fine swimming and other baths, R. from $2; *Sherwood*, *Bright View*, $2-3), consisting mainly of a huge hotel, the most elaborate fortification in the United States, and a group of cottages, and situated on a small peninsula on the N. side of the entrance to *Hampton Roads* (p. 561), with the Atlantic Ocean in front and *Chesapeake Bay* (p. 208) opening to the N.

Point Comfort received its name from Capt. John Smith (p. 561) in 1608 and has long been a favourite seaside-resort, frequented by the Northerners in winter and by the Southerners in summer. The immediate proximity of Fort Monroe, with its large garrison, adds a characteristic feature to the gaiety of the place. Good bathing, boating, golf, and 'crabbing' are among the attractions, and the Hotel Chamberlin has a shooting-preserve of 10,000 acres on the Chickahominy River (quail, duck, wild turkey, woodcock, snipe, and 'sora' or rail; railway return-fare $1.75, guide $1.50 per day, with dogs $2; shooting license $10). In winter the temperature rarely falls below 40°, and in summer it seldom exceeds 80°.

Steamers ply hence to *Norfolk* (½ hr.; 25 c.), *Baltimore*, *Richmond* (R. 89a; fare $1½), *Washington* (fare $2-3), and *New York* (Old Dominion Line, in 24 hrs.). Norfolk is also reached by ferry to *Willoughby Spit* and electric car thence (through-fare 35 c.). — Electric line to *Hampton* and *Newport News* (1 hr.), see pp. 561, 562. Another electric tramway runs to (2½ M.) *Buckrow Beach*, with a summer-hotel.

Fort Monroe, 100 yds. from the Chamberlin Hotel, was constructed in 1819 et seq. to command the mouth of the James River and the approach to the Norfolk Navy Yard and to furnish a base of operations against a hostile fleet attempting to enter Chesapeake Bay. The ramparts are about 2 M. in circumference, affording a fine walk, and enclose an area of 80 acres, which resembles a beautiful park. Outside the ramparts is a broad moat. Guard-mounting (11.30 a.m.; on Sun. 9.30 a.m.) and dress-parade are great attractions to the visitor. The fort is garrisoned by a battalion of heavy artillery and is the seat of the Artillery School of the U. S. Army. It contains a museum of military relics. Jefferson Davis was confined here for a year and a half after the Civil War, and then re-

leased without a trial. Off-shore is the low island of the *Rip-Raps*, almost covered by the works of *Fort Wool*.

Pleasant excursions may be made from Old Point Comfort to *Norfolk* (p. 561), *Hampton* (3 M.), *Newport News* (p. 561), etc. The steamer 'Mobjack', leaving Norfolk in the early morning and calling at Old Point Comfort 1 hr. later, makes a pleasant all-day excursion to points on *Mobjack Bay* (fare $1; meals à la carte).

c. Viâ Norfolk & Western Railway.

110 M. Railway to (104 M.) *Norfolk* in 2¼-3⅓ hrs. (fare $2.50). Steamer thence to (6 M.) *Old Point Comfort* in ½ hr. (fare 25 c.). — This railway traverses the seat of the final struggles of the Civil War (see below).

Richmond, see p. 555. — 8 M. *Drewry Bluff* (p. 560); 13 M. *Chester*.

23 M. **Petersburg** *(Chesterfield Ho.*, R. from $1; *Imperial, Shirley*, $2-3; *Rail. Restaurant)*, a manufacturing town of 21,810 inhab., on the *Appomáttox*, is of interest as the centre of the final operations of the Civil War. The ivy-clad ruins of the old *Blandford Church* are picturesque. A large stone bowl, at the N. end of the railway-bridge over the Appomattox, is known as 'Pocahontas' Wash Basin' (comp. p. 560).

Battlefields. When Grant crossed to the S. side of the James River in June, 1864 (comp. p. 559), he made *City Point* his base of supplies and spread his lines towards the W., so as to shut up Lee and his Confederate forces in Petersburg. The so-called *Siege of Petersburg* lasted from June 16th, 1864, to April 2nd, 1865; and during its continuance 13 pitched battles were fought in the neighbourhood. The intrenchments of Lee and Grant still form conspicuous features in the landscape; Grant's lines extended from the Appomattox to *Fort Fisher*, and thence E. to *Fort Bross*, a distance of 23 M. One of the best-known engagements was that of the *Old Crater*, to the E. of the city, on *Griffith's Farm*, where a small museum of war-relics is shown. Carriages ($1-1½ per hr.) and saddle-horses to visit the entrenchments and battlefields may be hired at the Petersburg hotels, and guides may also be obtained.

From Petersburg a branch-line runs to (123 M.) *Lynchburg*, on the main line of the railway (see p. 569), passing (100 M.) *Appomattox*, near which, at Appomattox Court House, the Civil War ended on April 9th, 1865, in the surrender of Gen. Lee and his forces to Gen. Grant. — An electric line runs to *Richmond* (1¼ hr.).

We now traverse a district of pine-forest. 36 M. *Disputanta;* 50 M. *Wakefield;* 67 M. *Windsor*. Farther on the train skirts the N. margin of the *Great Dismal Swamp*, which may be visited from (79 M.) *Suffolk* (55 ft.), at the head of the *Nansemond River*.

The Dismal Swamp (celebrated by Longfellow, in one of his anti-slavery poems, and also by Tom Moore), 40 M. long and 35 M. wide, is intersected by canals (the chief one, 22 M. long, connecting Chesapeake Bay with Albemarle Sound) and yields a large quantity of cedar, cypress, juniper, and other timber. The great American Cedar Factory at Richmond gets most of its material from this swamp. At Suffolk we may hire a man and a canoe to paddle us as far as (10 M.) *Lake Drummond* and back by the *Jericho Run Canal*, a novel and interesting trip.

104 M. **Norfolk**, see p. 561. — Thence to (110 M.) **Old Point Comfort**, see p. 563.

90. From Washington to Louisville.

Comp. Map, p. 156.

660 M. Chesapeake & Ohio Railway in 19½-21 hrs. (fare $16, sleeper $4; through-train from New York in 27 hrs., fare $18½, sleeper $5). — The scenery on this route is varied and often very fine, especially in crossing the Blue Ridge and Allegheny Mts. and in the valleys of the Greenbrier and the New River. Numerous places connected with the history of the Civil War are passed in Virginia. The C. & O. Railway issues a 'Battle Field Folder' giving particulars.

Washington, see p. 211. From Washington to (86 M.) *Orange* the line follows the tracks of the Southern Railway (see R. 91a).

At (93 M.) *Gordonsville* (440 ft.), the scene of a battle on Dec. 28th, 1864, we are joined by the line from Richmond and Old Point Comfort.

115 M. **Charlottesville** (400 ft.; *Jefferson Park*, at Fry Springs, $2½-3; *Gleason*, *Clermont*, $2-2½; *Rugby Hall*; *Rail. Restaurant*), a town of 6449 inhab., on *Moore's Creek*, is of interest as the home of Jefferson and the site of the University of Virginia.

The *University of Virginia (visible to the left from the train), founded in 1819, mainly through the exertions of Thomas Jefferson, lies 1½ M. to the W. of the town (street-car 5c.) and is attended by 800 students. The original buildings erected from Jefferson's designs consist mainly of parallel ranges of one-story dormitories and professors' houses, the inner rows bordering a tree-shaded campus, at one end of which stands the *Rotunda* (view from roof), restored by McKim, Mead, & White in 1897 after a fire and now containing the library. At the other end of the lawn are *Cabell Hall*, the *Mechanical Laboratory*, and the *Physical Laboratory*. The buildings also include the *Lewis Brooks Museum of Natural History* (8-6; with a facsimile of the mammoth), the *Observatory*, an *Hospital*, a *Chapel*, and a *Students' Dining Hall*. — *Pantops Academy*, 2 M. off, is frequented by boys from all over the country and also from abroad.

Monticello, the home of *Thomas Jefferson* (1743-1826), is finely situated on a view-commanding hill, 2½ M. to the S.E. of Charlottesville, and is an interesting example of the architecture of the period (visitors not admitted to the interior; grounds open to the public). The great statesman is buried in a small private graveyard adjoining the road leading to the house.

A visit may be paid to the *Monticello Wine Co.*, where various wines are produced from the grapes of the vicinity. The *Charlottesville Woollen Mills*, to the E., make uniforms for army officers and West Point cadets.

From Charlottesville to *Lynchburg* and the South, see R. 91a.

Our line now runs towards the W. and begins to ascend among the *Blue Ridge Mts.*, threading many tunnels. 137 M. *Afton* (1405 ft.; Afton Ho., $2-2½; Mountain Top Ho., 1½ M. from Afton and 2000 ft. above the sea, $2), pleasantly situated near the top of the ridge (tunnel) and affording fine views of the *Piedmont Valley* far below us. The orchards of this region produce the famous 'Albemarle pippin'. 141 M. *Basic City* (p. 598). — 154 M. *Staunton* (1385 ft.; Eakleton, $2-2½; Palmer Ho., $2), an industrial town with 7289 inhab. and several large educational institutions, lies on the plateau between the Blue Ridge and the Allegheny Mts., at the head of the Shenandoah Valley.

Staunton is the junction of a line (B. & O. R. R.) to (36 M.) Lexington (*Lexington*, $2-2½), the seat of the *Washington and Lee University* (450 stu-

dents; good portraits, by C. W. Peale, of Washington and Lafayette) and the *Virginia Military Institute. Generals Robert E. Lee* and *'Stonewall' Jackson* are both buried here, and statues of them have been erected.

North Mt. (2065 ft.) rises to the right near (167 M.) the station of that name (1645 ft.). 186 M. *Goshen* (1410 ft.; Allegheny Hotel, finely situated on a bluff to the left, $ 3-5). — 193 M. *Millboro* (1680 ft.) is the station for (5½ M.) *Rockbridge Alum Springs* (2000 ft.; Hotels, $ 2-3½), for (2 M.) *Millboro Springs*, for (10 M.) *Bath Alum Springs*, etc. — 210 M. *Clifton Forge* (1045 ft.; Gladys Hotel, $ 2½-3; Rail. Restaurant), on the *Jackson River*, is the junction of the James River Branch of the C. & O. R.R. To the left flows the picturesque Jackson. — From (223 M.) *Covington* (1245 ft.; Intermont, $ 2-5) a branch-line runs to *Hot Springs*.

From Covington to Hot Springs, 25 M., railway in 1¼ hr. (through-sleeper from New York viâ Washington). — **Hot Springs** are connected by good roads, traversed by coaches, with (2½ M.) *Healing Springs* and (5 M.) *Warm Springs*. All these thermal springs, situated in a mountain-girt valley 2000-2500 ft. above sea-level, are used both for drinking and bathing and are efficacious in gout, rheumatism, liver and cutaneous complaints, dyspepsia, scrofula, etc. All are provided with ample hotel and cottage accommodation, the transient rates varying from $ 2 per day at the Healing Springs Hotel to $ 5 per day at the *New Homestead Hotel at Hot Springs (cheaper by the week or longer). The Alphin ($ 3-4) at Hot Springs, a smaller house, is also well spoken of. The Hot Springs have a temperature of 78-110° Fahr., the Warm Springs of 98°, and the Healing Springs of 84°. The scenery in the neighbourhood is picturesque, and numerous pleasant excursions can be made. There is a golf-course at Hot Springs. Game-suppers, with 'Virginia' cooking, at the *Fassifern Farm* are a popular feature.

Farther on we cross *Dunlap Creek* and *Jerry's Run Fill*, 220 ft. high. Both before and after (239 M.) *Alleghany* (2070 ft.), on the crest of the *Allegheny Mts.*, we thread a long tunnel. Coaches run hence to (9 M.) *Sweet Chalybeate Springs* (Hotel, $ 2-3) and (10 M.) *Sweet Springs* (2000 ft.; $ 2-2½), one of the oldest and most popular of Virginian resorts (water good for dyspepsia, dysentery, etc.). — The line descends. We now enter *West Virginia* (p. 189).

245 M. **Greenbrier White Sulphur Springs** (2000 ft.; * *Grand Central Hotel*, $ 3½ per day, $ 21 per week; *The Greenbrier*, from $ 3; numerous boarding-houses and cottages) is finely situated in the heart of the Alleghenies and is visited annually by large numbers of guests.

For over a century the Greenbrier White Sulphur Springs were the typical resort of the wealth and aristocracy of the South; and the pictures of Southern life, beauty, and fashion still seen here will be found of great interest by the European or Northern visitor. The valley is well wooded and affords delightful drives.

The temperature of the water is 62° Fahr. and its chief ingredients are nitrogen, oxygen, carbonic acid, hydro-sulphuric acid, sulphates of lime and magnesia, and carbonate of lime. It is used both internally and externally, and is efficacious in dyspepsia, liver complaints, nervous affections, gout, rheumatism, skin diseases, asthma, etc. Mud baths are also used. The spring yields 30 gallons per minute. Large swimming-baths.

Among the most prominent of the mountains enclosing the valley are *Kate's Mt.* (3500 ft.), 1 M. to the S.; *Greenbrier* (3500 ft.), 1 M. to the W.; and the *White Rock* (3200 ft.), 3 M. to the S.W.

The train now descends the valley of the *Greenbrier*. Many tunnels. 255 M. *Ronceverte* (Ronceverte, $2) is the junction of a branch-line to (104 M.) *Winterburn* and also the starting-point of the coach to (16 M.) *Salt Sulphur Springs* (2000 ft.; Hotels, $2-2½). Coaches run from (278 M.) *Talcott* (1550 ft.) to (12 M.) *Red Sulphur Springs* (Hotel, $ 2½), resembling the Eaux Bonnes of the Pyrenees (54° Fahr.). Beyond (295 M.) *Hinton* (1370 ft.) we follow the *New River*, with its romantic falls. 312 M. *Quinnimont* (1195 ft.); 342 M. *Hawk's Nest* (825 ft.; hotel), opposite a huge cliff 1200 ft. high; 351 M. *Kanawha Falls* (670 ft.), with a pretty waterfall on the *Kanawha River*, formed by the confluence (2 M. above) of the New River and the *Gauley*

The train now leaves the picturesque scenery and reaches a more open district. Numerous coal-mines. To the right flows the Kanawha. — 387 M. **Charleston** (605 ft.; *Hot. Ruffner*, $2½-3½), the capital of West Virginia, a city of 11,099 inhab., with a *State House*. A fine bridge, 75 ft. high, leads across the river from the station to the city. — At (434 M.) *Guyandotte* (560 ft.) we reach the *Ohio River*. At (437 M.) *Huntington* (Rail. Restaurant) we change from Eastern to Central time (p. xiv). 445 M. *Kenova* is named from its position at the conjunction of Kentucky, Ohio, and (W.) Virginia. At (447 M.) *Catlettsburg* (560 ft.) we cross the *Big Sandy* and enter *Kentucky* (the 'Blue Grass State'). The train now follows the left bank of the Ohio all the way to Cincinnati. At (453 M.) *Ashland* (680 inhab.) the line forks, the right branch running viâ *Maysville* to (146 M.) *Cincinnati* (see R. 60 b). Our line keeps to the left. 527 M. *Olympia*, for (2½ M.) *Olympia Springs* (Hotel, $2-2½); 542 M. *Mt. Sterling*, the junction of a branch-line to (20 M.) *Rothwell*. At (557 M.) *Winchester* we cross the L. & N. R. R. and at (576 M.) *Lexington* (p. 582) the Texas Pacific Railway. 629 M. *Shelbyville*. We cross the *Ohio* in entering (660 M.) *Louisville*.

Louisville. — **Railway Stations.** *Union Depot*, on the river, between 7th and 8th Sts., for the Baltimore, Ohio, & South-Western, the Southern, the C. C. C. & St. L., and other railways; *Union Station*, 10th St., cor. Broadway (a handsome building), for the Louisville and Nashville, and other lines; *14th Street Depot*, for the Pennsylvania R. R.

Hotels. Seelbach's, Walnut St., cor. 4th St., R. from $ 2; Seelbach Annex (for men), Main St., R from $ 1; Galt House, Main St., cor. 1st St., R. from $ 1½; Louisville Hotel, Main St., between 6th and 7th Sts., $ 3-5, R. from $ 1½; Willard's, Fifth Avenue, from $ 2.

Electric Tramways traverse all the principal streets and run to the suburbs (5 c.). Interurban electric lines ply to *Indianapolis* (p. 401) and to several small places near Louisville. — **Cabs** from the stations or wharf into the town 25-50 c. each person; per hr. $ 1½, each addit. hr. $ 1. — **Ferries** ply to *Jeffersonville*. — **Steamers** run to Cincinnati, Evansville, and other places on the *Ohio* and *Mississippi*.

Theatres. *Macauley's*, Walnut St.; *Masonic*, Chestnut St.; *Mary Anderson*, 4th St., near Chestnut St.; *Avenue*, Fourth Ave.; *Buckingham* (burlesques), Jefferson St. — *Pendennis Club*, Walnut St., near 4th Ave.; *Tavern Club*, 3rd St., near Chestnut St. (introduction necessary at these).

Post Office, cor. of 4th Ave. and Chestnut St. (7 a.m. to 10 p.m.; Sun. 9-10 a.m.).

Louisville (450 ft.; the 'Falls City'), the largest city of Kentucky and the entrepôt of the lower *Ohio*, which here descends 26 ft. within 2 M., lies on a level plain and extends for 6 M. along the river. Pop. (1900) 204,731 (now 250,000).

Louisville was founded by Col. George Rogers Clark in 1778 and named in honour of Louis XVI. of France. It received its city charter in 1828, when its population was about 10,000. In 1850 it contained 43,194 inhab., in 1870 it had 100,753, and in 1890 it had 161,129. In March, 1890, Louisville was visited by a terrific tornado, which swept through the heart of the city with a width of 600-800 ft., levelling almost everything that stood in its way, destroying property to the value of $3,000,000, and killing 76 persons. — *Audubon* (1780-1851), the naturalist, was a resident of Louisville for some years. — The 'Kentucky Derby' is held here in May.

Since the Civil War Louisville has rapidly grown in importance as one of the chief gateways to the S.W. Its trade, both by river and rail, is very large; and the value of its manufactures in 1900 was $78,746,390 (15,749.278£). It is the largest leaf tobacco market in the world, the sales amounting annually to 130,000 hogsheads, valued at about $11,000,000, and is second in importance for manufactured tobacco. Its sales of Kentucky whiskey are also very extensive, and the mule-market rivals that of St. Louis (p. 413). Other important industries are pork-packing, brewing, and the making of iron, farm waggons, ploughs, cement, leather, flour, blue jeans, and cast-iron gas and water pipes. — Natural gas (p. 198) is largely used here.

The *Falls of the Ohio*, adjoining the Kentucky & Indiana Bridge (see p. 569), are rapids rather than falls and are scarcely visible when the river is full. Vessels are enabled to avoid them by a canal 2½ M. long.

Perhaps the most prominent building in Louisville is the Custom House, in Chestnut St., between 3rd and 4th Sts. The *Court House* is in Jefferson St., between 5th and 6th Sts., and is adjoined by the *City Hall*, with its square clock-tower. — The *Louisville Public Library*, at the cor. of 4th and York Sts., contains 113,000 vols., an art-gallery, and a small museum, including the *Troost Collection of Minerals. — The *Farmers' Tobacco Warehouse*, in Main St., the centre of the tobacco trade, has a storage capacity of nearly 7000 hogsheads and sells about 30 million pounds of leaf tobacco yearly. Public auctions of tobacco take place here almost daily. — The *University of Louisville*, cor. of 8th and Chestnut Sts., is a handsome building (800 students). — The *Lincoln Bank*, cor. of 4th and Market Sts., is 15 stories high (*View from upper windows and roof).

No stranger in Louisville should omit to visit *Cave Hill Cemetery, which lies on the E. margin of the city (tramway) and is very prettily laid out. The high grounds in it command good views. The large building with a dome seen to the N.E. is the *State Blind Asylum*, containing the *American Printing House for the Blind.* A little nearer is the *Workhouse.* Among the monuments in the cemetery is one to the family of *George Keats*, the younger brother of the poet, who emigrated to the United States in 1818 and died at Louisville in 1842. — Fourth Avenue (tramway), with many pleasant residences, leads S., passing the pretty little *Central Park*, to the *Racecourse.* Louisville possesses three fine parks: *Iroquois Park*, **Cherokee Park* (well worth a visit), and *Shawnee Park*, to the S.,

E., and W. of the city. The *First Regiment Armoury* has an enormous drill-hall and can seat 15,000 persons.

The *Louisville Bridge*, 1 M. long, crossing to the W. end of *Jeffersonville*, was built in 1868-72 and has 27 iron spans supported by limestone piers. The *Kentucky and Indiana Bridge*, leading to *New Albany* (p. 417), is 1/2 M. long (1886). A third bridge, also leading to Jeffersonville, was constructed in 1892.

Zachary Taylor (1784-1850) is buried near his old home, 5 M. to the E. of Louisville (monument).

From Louisville to the *Mammoth Cave*, *Nashville*, and *New Orleans*, see R. 92b; to *Memphis* and *New Orleans*, see R. 92c; to *Cincinnati*, see R. 92b, c. — A visit to the *Wyandotte Cave* (p. 417) is easily made from Louisville by rail or steamer.

From Louisville to Lexington, 87 M., *Southern R. R.* in 3 1/2 hrs. (also in about the same time by the L. & N. or C. & O. R. R.). The Lexington branch diverges at (63 1/2 M.) *Lawrenceburg* from the main line to Chattanooga. — 87 M. *Lexington*, in the 'Blue Grass Country', see p. 582.

Pious pilgrims may visit the log-cabin in which Abraham Lincoln (1809-1865) was born by travelling viâ the Illinois Central R. R. to (64 M.) the village of *Hodgensville*.

91. From Washington to New Orleans.

a. Viâ Southern Railway and Atlanta.

Comp. Map, p. 156.

1145 M. Railway in 32-36 hrs. (fare $27.50; sleeper $6.50, tourist sleeper $3.25). Through vestibuled train (resembling that described at p. 229, from New York to New Orleans in 41-44 hrs. (fare $34; sleeper $8).

From *Washington* (p. 211) the line runs at first towards the S.W. Numerous earthworks and rifle-pits, grim mementoes of the Civil War, catch the practised eye on both sides of the line. 8 M. *Alexandria* (p. 228). To the left lies the National Cemetery (p. 227). — 34 M. *Manassas* (315 ft.; Manassas Ho., $2) was the scene of two battles during the Civil War (monument to the right).

In the first *Battle of Manassas* or *Bull Run* (July 21st, 1861), which was the first important conflict of the war, the Federals under McDowell were routed by the Confederates under Beauregard and thrown back on Washington. In the second battle (Aug. 29-30th, 1862), fought on almost the same ground, 3 M. to the right, Lee defeated the Federals under Pope.

At (57 M.) *Remington* we cross the *North Fork*. 69 M. *Culpeper* (Millar's, Waverly, from $2) was an important point during the Civil War and is now the site of a National Cemetery. The *Rapidan River*, which we cross at (80 M.) *Rapidan*, was another name frequently heard during the struggle in Virginia. 86 M. *Orange*. — At (114 M.) **Charlottesville** (p. 565; *Rail. Restaurant*) we intersect the C. & O. Ry. (R. 90). We continue to run thence towards the S.W., with the *Blue Ridge* at some distance to the right.

174 M. Lynchburg (525 ft.; *Carroll*, $2 1/2-4; *Arlington*, $2-2 1/2; *Rail. Restaurant*), an industrial and tobacco-exporting city of 18,891 inhab., picturesquely situated on the S. bank of the *James*.

We here intersect the C. & O. and the Norfolk & Western Railways (see p. 575).

Near Lynchburg is the *Randolph Macon Woman's College* (385 students), the foremost woman's college of the South.

Farther on we cross several streams and pass numerous small stations. — 240 M. **Danville** (410 ft.; *Burton*, $2½-4; *Rail. Restaurant*), a busy town of 16,520 inhab., on the *Dan*, in the centre of a tobacco-growing region, is the junction for Richmond (p. 602).

Beyond Danville we enter *North Carolina* ('Old North State'). — 288 M. **Greensboro** (840 ft.; *Benbow*, from $2½, R. from $ 1), a growing town of 10,035 inhab., with a trade in tobacco, coal, and iron.

From Greensboro to Raleigh and Goldsboro, 130 M., railway in 5-8½ hrs. This line passes through a cotton and tobacco growing country. — 17 M. *Elon College;* 21 M. *Burlington*, with cotton-mills. — 46 M. *University* is the junction of a branch-line to (10 M.) *Chapel Hill*, the site of the *University of North Carolina*, founded in 1795 (775 students). — 55 M. Durham (*St. Helen*, $ 2½-3), a city of 16,000 inhab., is one of the chief tobacco-making places in America. *Duke's* and the *Blackwell Co. Factories* together manufacture over 35,000,000 lbs. of tobacco yearly. *Trinity College* (275 students; Methodist Episcopal) has been handsomely endowed by the tobacco magnates, Col. Duke and Col. Carr. A branch-line to *Richmond* passes (70 M.) *Chase City*, near which is the *Mecklenburg Hotel (from $ 3), with an excellent lithia spring. — At (81 M.) Raleigh (p. 580) we intersect the Seaboard Air Line (R. 91 c). — 109 M. *Selma* is the junction of the line to Norfolk (see below) — 130 M. *Goldsboro* (110 ft.; Hotel Kennon, $ 2½-3), a small place with 5877 inhab., is connected by railway with (59 M.) New Bern (*Hazleton, Chattawka*, $ 2-2½), on the *Neuse River*, (95 M.) *Morehead*, and (98 M.) *Beaufort*, both on the Atlantic coast.

From Greensboro to Norfolk, 270 M., railway in 9½ hrs. — From Greensboro to (109 M.) *Selma*, see above. Our line here diverges to the left from that to Goldsboro and runs towards the N. 134 M. *Wilson*. At (150 M.) *South Rocky Mount* we connect with the Atlantic Coast Line (p. 602) and cross the *Tar* or *Pamlico River*. 178 M. *Hobgood;* 216 M. *Suffolk* (p. 564); 260 M. *Bruce;* 264 M. *Pinner's Point*. — 270 M. *Norfolk*, see p. 561.

A line also runs from Greensboro, viâ (29 M.) *Winston-Salem* (Zinzendorf, R. from $ 1½), an important tobacco-market, and *Fayetteville*, to (179 M.) *Wilmington* (p. 602).

Just beyond Greensboro, to the right, is the battlefield of *Guilford Court House* (March 15th, 1781), where the British under Cornwallis defeated the Americans under Greene. — We traverse many cotton-fields. Near Salisbury we cross the *Yadkin*. — 337 M. **Salisbury** (760 ft; *Vandeford*, $ 2½-3; *Central*, from $ 2), with 6277 inhab., was the seat of one of the chief Confederate prisons in the Civil War, and the *National Cemetery* contains the graves of more than 12,000 soldiers who died here in captivity. At *Spencer*, adjoining Salisbury, are the chief works of the Southern R. R.

From Salisbury to *Asheville* and *Knoxville*, see R. 97.

Near (381 M.) **Charlotte** (720 ft.; **The Selwyn*, from $ 3, R. from $ 1½; *Buford*, $ 2-3), with 35,000 inhab. and important cotton-manufactures, are some gold mines. It is one of the important towns of the New South, the junction of lines to *Wilmington* (p. 602), to *Winston-Salem* (see above), to *Columbia* and *Charleston* (R. 98 b), etc.

Lord Cornwallis had his headquarters in Charlotte (site marked by a tablet) more than once and described it as a 'hornet's nest', of which title

the inhabitants are still proud. A monument in front of the Court House celebrates the signing of the Mecklenburg Declaration of Independence, May 21st, 1775, which according to a strong tradition substantially anticipated the Jeffersonian.

408 M. *All Healing Springs.* Near (415 M.) *King's Mountain* (995 ft.) the Americans defeated the British on Oct. 7th, 1780, and near (448 M.) *Cowpens* is the scene of a more important victory of the patriots (Jan. 17th, 1781). The latter is in *South Carolina* ('Palmetto State').

457 M. **Spartanburg** (875 ft.; *Spartan Inn, Argyle Inn*, from $ 2). the junction of lines to *Columbia* (p. 603) and *Asheville* (p. 599), is a thriving little city of 11,395 inhab., in a district of iron and gold mines and mineral springs. — 488 M. **Greenville** (970 ft.; *Mansion Ho.*, $ 2-3), a city with 11,860 inhab., on the *Reedy River*, is the junction of a line to *Columbia* (p. 603). — From (528 M.) *Seneca* (945 ft.) the Blue Ridge Railway runs to (9 M.) *Walhalla*, the nearest station to (ca. 25 M.) **Highlands** (3823 ft.; **Davis Ho.*, $ 2; *Highland Ho.*, $ 2½), the highest village to the E. of the Rocky Mts., frequented for its bracing air and charming scenery. — Beyond Seneca we cross the *Savannah* and enter *Georgia* ('Empire State of the South'). About 2 M. from (555 M.) *Toccoa* are the beautiful *Toccoa Falls* (185 ft. high). 569 M. *Mt. Airy* (1560 ft.; Monterey, from $ 2½) affords a fine view of *Yonah Mt.* (3175 ft.) and the Blue Ridge. — The line now descends, — 571 M. *Cornelia* is the junction of a short line to (8 M.) *Clarksville* and (21 M.) *Tallulah Falls.*

Clarksville (1365 ft.; *Groves Ho., Mountain View*, $ 2) is a convenient point from which to explore the fine scenery of the Georgia portion of the *Blue Ridge Mts.* — The **Tallulah Falls** (*Cliff House, Tallulah Lodge*, $ 2-3½), 400 ft. high, lie in the deep gorge of the *Tallulah* or *Terrora*, which here cuts across the Blue Ridge. — Other points of interest in this district are the *Valley of Nacoochee*, 8-10 M. to the N.W. of Clarksville, and the *Falls of the Eastatoia*, 15 M. to the N. of Tallulah Falls.

From (583 M.) *Lula* a branch-line runs to (39 M.) *Athens* (p. 581). — 595 M. *Gainesville* (1200 ft.; Arlington, Mount View, $ 2), a small town of 4382 inhab.; 618 M. *Suwanee* (1025 ft.). Farther on *Stone Mt.* (1685 ft.), a huge mass of granite, is seen to the left (in the distance).

649 M. **Atlanta** (*The Piedmont*, R. from $ 1½; *The Aragon*, R. from $ 1½; *Kimball Ho.*, $ 2½-5, R. $ 1½-4; *Majestic*, $ 2½; *Ballard*, from $ 2, R. from 50 c.; *Rail. Restaurant;* Ger. Consul, *Dr. E. Zoepffel*), the capital of Georgia (the 'Gate City'), with 89,872 inhab., is a prosperous commercial and industrial city, and an important railway-centre (comp. pp. 579, 581, 611). It is well situated 1030-1175 ft. above the sea, and enjoys a healthy and bracing climate.

The chief point of interest in the history of Atlanta, which was founded in 1840, is its siege and capture (Sept. 2nd, 1864) by Gen. Sherman, who, after holding the city for two months, here began his famous 'March to the Sea' (comp. p. 609). The business-quarter was previously burned down, by design or by accident, but has been rebuilt on a finer and more modern plan. Atlanta is one of the chief distributing points in the

South for Northern and Western manufactures. The great staples of its domestic trade are tobacco and cotton. Among its industrial products are temperance drinks (notably Coca-Cola), cotton, fertilizers, furniture, patent medicines, car-wheels, flour, and iron (value in 1907, $ 40,000,000).

A good view of Atlanta and its environs may be had from the top of the fine *Candler Building* (opposite the Piedmont Hotel; open 11-12 a.m.).

The city has two stations, the old *Union Station* (used by the Seaboard Air Line and the L. & N.), and the new *Terminal Station* (Mitchell St.), used by the Southern, the Georgia Central, and the West Point R.R. A little to the S. of the old *Union Station* is the *State Capitol*, which contains a library of about 60,000 vols. and an interesting *Geological Collection*. A little to the N.W. is the *New Court House;* and farther to the N., beyond the railway, are the *Custom House* and the *L. & N. Freight House*, an enormous concrete structure. The *City Hall*, the *Chamber of Commerce*, the *Opera House*, the **Carnegie Library* (of white marble), the *Century Building*, the *Empire Building*, the *Equitable Building*, the *Jewish Temple*, and the *First Methodist Church* are notable edifices. Among the chief educational establishments are the *Georgia School of Technology* (400 students; a branch of the University at Athens, p. 581), the *Atlanta University* (340 coloured students), the *Agnes Scott Institute*, and the *Clark University* (500 coloured students). The finest private houses are in *Peachtree Street*.

In the suburb of *West End* was the home of *Joel Chandler Harris* ('Uncle Remus'; d. 1908). To the S. of the city are the large *McPherson Barracks*.

FROM ATLANTA TO BIRMINGHAM, 168 M., *Southern Railway* in 5½-6¼ hrs. — The chief intermediate station is (104 M.) Anniston (810 ft.; *Alabama*. $ 3; *Anniston Inn*, $ 2½-4), situated among the foot-hills of the Blue Ridge, It is surrounded with rich beds of brown iron ore. Pop. (1900) 9695. Among its chief buildings are the fine *Church of St. Michael and All Angels*, the *Noble Institute for Boys and Girls*, and the *Barber Memorial Seminary*, for coloured girls. — 168 M. *Birmingham*, see p. 579. Birmingham is also reached from Atlanta by the *Seaboard Air Line* (171 M., in 5-6 hrs.).

Our train now passes on to the tracks of the *Atlanta & West Point R. R.* — 658 M. *College Park*, with the large and handsome building of the Southern Female College; 688 M. *Newnan* (955 ft.), the junction of a line to Macon (p. 611). At (736 M.) *West Point* (575 ft.) we cross the *Chattahoochee*, enter *Alabama* ('Cotton Plantation State'), and join the lines of the *Western Railway of Alabama*. — 758 M. *Opelika* is the junction of branch-lines to (29 M.) *Columbus* and to *Birmingham* (p. 579).

Columbus (*Rankin Ho., Racine*, $ 2½-3½; *Springer*, R. $ 1) is a busy industrial town of 17,614 inhab., with large cotton, woollen, and flour mills.

From (785 M.) *Chehaw* a railway runs to (5 M.) **Tuskégee** (g hard), with its interesting Normal and Industrial School for coloured pupils (1650 students), founded and conducted by Mr. Booker Washington, the distinguished coloured educationalist. The practical instruction in scientific agriculture is one of the most successful and interesting departments of the school (1000 acres; annual value of products of all kinds, $ 250,000). It is the parent of many smaller institutions of the same kind in the South. Several of the buildings have been

erected by the students. In 1903 Mr. Carnegie presented the Tuskégee Institute with $600,000 as the nucleus of an endowment fund. Comp. 'Tuskegee and its People', edited by *B. T. Washington* (1905). — Farther on the *Alabama River* runs to the right.

824 M. **Montgomery** (160 ft.; *Exchange*, R. from $1^1/_2$; *Glenmore*, $2^1/_2$-3; *Windsor*, $2-2^1/_2$; *Mabson*, R. from $1; *Rail. Restaurant*), the capital and third city of Alabama, lies on the high left bank of the Alabama, at the head of navigation. It contains (1900) 30,346 inhab. and carries on a large trade in cotton (150,000 bales annually) and various manufactures. This city is a good example of the extraordinary industrial development of the South during the last decade. The dome of the *State House* affords an extensive view. In the grounds is a handsome *Confederate Monument*. The *Post Office*, *Court House*, *Carnegie Library*, and *City Hall* are large buildings. Round the town are many old-fashioned plantation-residences.

In the State House the Confederate Government was inaugurated by Jefferson Davis on Feb. 18th, 1861, whence Montgomery has been called the 'Cradle of the Confederacy'. It was also the scene of Yancey's celebrated Secession speech on Jan. 11th, 1861. — Hidden behind the houses in the street between the Post Office and the State House is an old *Slave Market*, with all its details intact. From *Knabe's Drug Store* (unchanged) was despatched the telegraphic order to fire on Fort Sumter (p. 604) in 1861.

We now pass on to the *Louisville & Nashville R.R.* 868 M. *Greenville.* From (883 M.) *Georgiana* a branch-line leads to (48 M.) *Opp*, and another thence to (23 M.) *Florala*, a new town on the border of Florida and Alabama. 904 M. *Evergreen.* — 943 M. *Flomaton.*

From Flomaton a line runs N to (172 M.) *Myrtlewood*, passing (83 M.) *Snow Hill*, with a highly interesting institute for coloured students (300), established by Mr. R. O. Simpson.

From Flomaton to *Pensacola*, see p. 630.

Farther on we cross the *Tensas* and *Mobile Rivers* and skirt the estuary of the last to —

1004 M. **Mobile.** — *Battle House, rebuilt in 1908, R. from $1^1/_2$; *Cawthon Hotel, R. from $1^1/_2$; Hotel Bienville, from $2^1/_2$, R. from $1; St. Andrew (opposite the post-office), R. from $1; Southern, R. from 75 c. — *Railway Restaurant.* — Tramways traverse the chief streets (5 c.). — Steamers ply to points on the Alabama and Tombigbee; also to New York, Liverpool, Tampa, Havana, Vera Cruz, etc. — Post Office, at the cor. of Royal and St. Francis Sts.

Consuls. British Vice-Consul, *Mr. Edmund Seiders*, Masonic Temple German Consul, *Mr. E. Holzborn.*

Mobile, the largest city and only seaport of Alabama, lies on the W. side of the Mobile River, just above its entrance into *Mobile Bay.* It is situated on a plain, backed by low hills, and is well laid out. Its broad and quiet streets are shaded with magnolias and live oaks, and its gardens are fragrant with orange blossom and jessamine. The harbour is approached by a deep-water channel through Mobile Bay and now admits vessels of 30 ft. draught. At the entrance to the bay, 30 M. below the city, are two forts. Pop. (1900) 38,469.

Mobile was founded about 1702 by the Sieur de Bienville, who transferred the earliest French colony in this region from Biloxi (p. 574) to Mobile Bay. It was the capital of Louisiana down to 1723. In 1763 it

passed, with part of Louisiana, to Great Britain; in 1780 it was handed over to Spain; and in 1803 it became part of the United States by the 'Louisiana Purchase', though the Government did not take possession until 1813. It was incorporated as a city in 1819, with 2500 inhab., a number that had increased to 20,515 in 1850 and to 32,034 in 1870. In 1864 the harbour was attacked and closed by Adm. Farragut. The city itself did not surrender to the Federal troops till April 12th, 1865.

The chief articles of Mobile's commerce are cotton, lumber and manufactured wood-products, grain, coal, and naval stores. The value of its exports in 1907 was $ 29,000,000. Its manufactures include shingles, barrel-staves, saddlery, bricks, cedar pencils, pearl buttons, cotton-cloths, cotton-seed oil, cordage, cigars, and beer.

The most ornate building in the city is the *Custom House & Post Office*, at the corner of Royal and St. Francis Sts., erected at a cost of $ 250,000 (50,000 *l.*). Other important edifices are the *Cotton Exchange*, the *Court House*, the *Young Men's Christian Association*, the *Barton Academy*, the *U. S. Marine Hospital*, the *City Hospital*, the *Providence Infirmary*, the *Medical College*, the *Fidelia*, *Elks*, and *Athelstan* (three club-buildings), the *Masonic Temple*, the *City Bank & Trust Co. Buildings*, the *Southern Market and Armoury*, the *Union Depot* (1907), and the *Cathedral of the Immaculate Conception*. The finest private houses are in the shady **Government Street*. In Duncan Place, at the foot of Government St., near the Union Station, is a statue of *Raphael Semmes* (1809-77), commander of the Confederate cruiser 'Alabama' in the Civil War. The **Shell Road*, extending for 8 M. along the Bay, is the favourite drive.

About 6 M. to the W. is *Spring Hill* (electric tramway; hotel), with a large Roman Catholic College (200 students). Halfway to it we pass a large Roman Catholic Convent and Academy for Girls. — *Monroe Park* is a popular resort on the Shell Road (also reached by tramway). At the S. end of the Shell Road is *Frederic's Restaurant* (fish, game, and oysters). — More distant resorts of the Mobilians are *Point Clear* (Grand Hotel, $ 2½), on the E. shore of the Bay; *Citronelle* (Hygeia Hotel, $ 2), 30 M. to the N.; *Magnolia Springs* (Woodbound, $ 2); *Alabama Port*, on the W. shore of the Bay; and *Coden* and *Bayou La Batre*, on the Gulf Coast, 33 M. from the city. — Across the bay, 15 M. from Mobile (steamer 25 c.), lies *Fairhope* (Fairhope Hotel), a thriving little colony (700 inhab.) established on the 'Single Tax' theory of Henry George.

Beyond Mobile the train runs near the *Gulf of Mexico*, of which it affords occasional views to the left. It traverses a characteristic Southern landscape, passing savannahs, cane-brakes, and pine forest, and crossing several 'bayous'. Palmettoes and moss-draped live-oaks are among the most characteristic vegetation. Beyond (1029 M.) *Grand Bay* we enter *Mississippi* ('Bayou State'). At (1044 M.) *Scranton* we pass on a low trestle across the several forks of the *Pascagoula River*, just above their entrance into the bay of the same name. 1060 M. *Ocean Springs* (Ocean Springs Ho., $ 2-5), a seaside-resort with two chalybeate springs. At (1064 M.) *Biloxi* (Hotel de Montross, $ 2½-3; Brit. vice-consul, Mr. J. J. Lemon), where we cross another trestle, the Sieur de Bienville erected a fort in 1699, before he transferred his colony to Mobile (p. 573). — Jefferson Davis had his country-home at (1069 M.) *Beauvoir*, where he died in 1889. The house has been converted into a Home for

Veterans of the Confederate Army. — 1073 M. *Mississippi City*, a seaside-resort known for its excellent mackerel fishing. — 1076 M. *Gulfport* (Great Southern Hotel, with 250 rooms, R. from $1½), the terminus of the *Gulf & Ship Island R. R.* to (159 M.) Jackson (p. 588), has a railway-pier extending 1 M. into Mississippi Sound. It possesses the only deep-water harbour between Mobile and New Orleans and exports great quantities of pine lumber.

1086 M. **Pass Christian** (**Mexican Gulf Hotel*, $3-5; *Magnolia*, $2½-3; *Lynne Castle*, $2-3) is the chief of the summer and winter resorts on the 'Gulf Coast'. On leaving it we cross a long trestle of creosoted timber to (1091 M.) *Bay St. Louis* (Clifton, from $1½), a flourishing little town with 2872 inhabitants.

Beyond (1104 M.) *Claiborne* we cross the *Pearl River* and enter *Louisiana* ('Pelican State'). Farther on we cross the outlet of *Lake Pontchartrain* (p. 636) and traverse the peninsula between it and *Lake Borgne*. *Lake Catherine* (r.) is an arm of the former. 1107 M. *Dunbar*, a noted fishing centre, formerly known as *English Lookout*, from its occupation by the British army in 1812. — 1118 M. *Lake Catherine Station;* 1124 M. *Chef Menteur;* 1142 M. *Pontchartrain Junction*. In entering New Orleans, the train runs down the middle of the wide street named the 'Champs Elysées'.

1145 M. **New Orleans**, see R. 109.

b. Viâ Southern Railway, Norfolk & Western Railway, and Chattanooga.

Comp. Map, p. 156.

1112 M. in 34¾ hrs. Southern Railway to (174 M.) *Lynchburg;* Norfolk & Western Ry. thence to (378 M.) *Bristol;* Southern Railway thence to (620 M.) *Chattanooga;* Queen & Crescent Route thence to (1112 M.) *New Orleans* (through-fare $27.50; sleeper $6.50). — Passengers from New York are forwarded in through-sleepers (through-fare $34, sleeper $9).

From Washington to (174 M.) *Lynchburg*, see p. 569. We now pass on to the tracks of the Norfolk & Western Railway, thread a tunnel, and begin to ascend towards the Blue Ridge Mts. The finely-shaped **Peaks of Otter* (3875-4000 ft.) are seen to the right. They are best reached by carriage (7 M.) from (199 M.) *Bedford* (900 ft.; Hot. Bedford, $2½-3), a small town with 2416 inhab. and various industries. To the right, beyond it, is the handsome *Randolph-Macon Academy*. — At (216 M.) *Blue Ridge* (1240 ft.), with mineral springs and a hotel ($3), we begin to descend on the other side of the crest.

227 M. **Roanoke** (905 ft.; **Hotel Roanoke*, $2½-5; *Ponce de Leon*, $2½-4; *Stratford*, *St. James*, $2), finely situated on the *Staunton River*, among the Blue Hills, has grown since 1880, from the insignificant hamlet of *Old Lick* (500 inhab.), to a busy city of 21,495 inhab., with large machine, iron, bridge, carriage, and other manufactories. The new *Federal Building*, the *Academy of Music*, and the *Randolph Market* deserve a visit.

Mountain Park, 2 M. to the S. of the city, reached by cars, with a Casino (theatre in summer), affords a view of the river and Roanoke Valley.

Roanoke is the junction of various branches of the Norfolk & Western Ry. (through the *Shenandoah Valley* to *Hagerstown*, see R. 96; to *Norfolk*, see p. 561; to *Winston-Salem*, see p. 570).

From (234 M.) *Salem* (1005 ft.) stages run to (9 M.) *Roanoke Red Sulphur Springs* (Hotel, $2). 247 M. *Elliston* (1250 ft.); 251 M. *Shawsville* (1475 ft.), the station for (7 M.) *Crockett Arsenic Lithia Springs;* 255 M. *Montgomery*, for (1 M.) *Montgomery White Sulphur Springs* (tramway); 260 M. *Christiansburg* (2005 ft.), for (3 M.) *Yellow Sulphur Springs* (stage; Hotel, $2½). — 271 M. *East Radford* (1770 ft.; Shere, $2), on New River.

From East Radford to Columbus, 406 M., railway in 14½ hrs. — This line descends through the Alleghenies along the left bank of the *New River*. 22 M. *Pembroke* (1620 ft.), for (8 M.) *Mountain Lake Hotel* (4500 ft.; $2-3); 26 M. *Big Stony Junction*. At (40 M.) *Glen Lyn* it leaves the New River and ascends to (63 M.) *Bluefield*, beyond which it traverses the great *Pocahontas Coal Field*. From (76 M.) *Bluestone Junction* a short branch-line runs to (1 M.) *Pocahontas*. Beyond (74 M.) *Cooper* we thread a tunnel the sides of which are of coal. We then descend to the *Elkhorn* and *Tug River*, passing below a corner of Kentucky by a long tunnel at (156 M.) *Thacker*. From (182 M.) *Naugatuck* we descend the *Twelve Pole River* to (267 M.) *Kenova*, at the confluence of the *Ohio* and the *Big Sandy*. We cross the former river and enter *Ohio*. 279 M. *Ironton*. At (306 M.) *Portsmouth* we leave the Ohio and ascend the Scioto Valley, which is full of interesting remains of the 'Mound Builders' (comp. p. lxiv). Some of the most extensive of these are near Portsmouth, which is 35 M. by railway from *Peebles* (*Serpent Mound;* p. 408). Near (330 M.) *Piketon* is a remarkable '*Graded Way*', 1080 ft. long. 355 M. *Chillicothe* (p. 404) also lies amid numerous mounds and circles. 375 M. *Circleville*. — 406 M. Columbus, see p. 349.

286 M. *Pulaski* (1905 ft.; Maple Shade Inn, open in summer only, $2-2½; Pulaski, $2), a busy little iron and zinc making town with 2813 inhab., is connected by a branch-line with the *Cripple Creek District*, with its rich deposits of brown hematite iron ore. 299 M. *Max Meadows* (2015 ft.); 307 M. *Wytheville* (2230 ft.; Fourth Avenue, Otey, Boyd, $2), a frequented summer-resort. To the S. (left) are the *Lick Mts.*, here dividing the valley into two branches. 320 M. *Rural Retreat* (2500 ft.), the highest point on the line; 334 M. *Marion* (2125 ft.), with the State Insane Asylum.

378 M. Bristol (1700 ft.; *Hamilton*, from $2; *St. Lawrence*, $3), a tobacco market with 4579 inhab., lies on the boundary between Virginia and *Tennessee*. The train now passes on to the track of the Southern R. R. — The scenery continues picturesque. — 403 M. *Johnson City* (1630 ft.), with a Soldiers' Home (3500 inmates), erected at a cost of $3,000,000.

A narrow-gauge railway, known as the '*Cranberry Stem Winder*', ascends through the *Doe River Canyon* (1500 ft. deep) to (26 M.) *Roan Mt. Station* and (34 M.) *Cranberry*. From Roan Mt Station stages ($2) run to (12 M.) the *Cloudland Hotel* ($2½), on the summit of Roan Mt. (6315 ft.), the highest human habitation to the E. of the Rocky Mts. The °View hence is very extensive, some authorities considering it the finest in Western North Carolina. The rhododendrons and azaleas are at their best between June 20th and July 10th. Excursions may be made hence over the mountain-roads to *Hot Springs* and (80 M.) *Asheville* (p. 599).

On a hill to the left as we leave (435 M.) *Greeneville* is the grave monument of *Andrew Johnson* (1808-75), a resident of the district. — 467 M. *Morristown* (1385 ft.), the junction of the line to Asheville and Salisbury described in R. 97.

A short branch-line runs hence to *Tate Spring* (Hotel, $2-5), near the base of *Clinch Mt.* (ca. 2500 ft.).

Beyond Morristown we enjoy frequent glimpses of the *Holston River*, which we cross before reaching Knoxville.

509 M. **Knoxville** (930 ft.; *Imperial*, $2½-5; *Colonial*, *Stratford*, R. from $1; *Cumberland*, $2-3), the chief city of E. Tennessee, is finely situated on the *Tennessee River*, formed 4 M. farther up by the junction of the *Holston* and the *French Broad*. Pop. (1900) 32,637 (with suburbs, over 65,000). It is the centre of a coal-mining district and of the Tennessee marble district, from which 350,000 cubic ft. of this beautiful stone are annually shipped. It has a large trade in country produce and various manufactures. About a dozen different lines radiate from its two railway-stations. Among the chief buildings are the *University of Tennessee* (750 students), the *Agricultural College* (belonging to the University), the *Custom House*, the *Court House* (with statue of John Sevier, first Governor of Tennessee, in its grounds; 1744-1815), the *Lawson-McGhee Library*, the *Second Presbyterian Church*, *St. John's Episcopal Church*, the *Deaf & Dumb School*, the *City Hospital*, the *Knoxville College* (coloured students), and the *Market House*.

Knoxville, founded in 1791, was the first capital of Tennessee. In 1863 the city and the adjoining *Fort Sanders* were unsuccessfully besieged by the Confederates. — Fresh-water pearls are found in great numbers in the vicinity. — The *Summer School of the South* for teachers (2000 students) is held annually in the grounds of the University. — Visits may be paid to the *National Cemetery*, *Gray Cemetery*, *Chilhowee Park* (E.), and *Fountain City* (N.). — A log-cabin in E. Front Ave. is shown as the home of George Farragut, father of *Admiral Farragut* (1801-70). The latter was born at *Lowe's Ferry*, 13 M. to the S.W., where a memorial to him was unveiled in 1900.

Mountaineers may go by train to (16 M.) *Maryville* (Jackson Ho., $2), 25 M. (drive) from Thunderhead Peak (5520 ft.), one of the finest of the *Great Smoky Mts.* (ascent, with guide, in 7-8 hrs.; *View). — Not far off, to the E., is a reservation containing about 1800 *Cherokee Indians*.

A branch of the Southern Railway runs from Knoxville to (65 M.) ***Cumberland Gap** (1315 ft.), the chief pass across the *Cumberland Mts.*, between Virginia and Kentucky, and to (69 M.) **Middlesboro** (*The Middlesborough*, from $2; *Cumberland Ho.*, $2½), a small iron-making town with 4162 inhabitants. In approaching the Gap the railway passes through a tunnel, 3750 ft. long, which begins in Tennessee, passes under a corner of Virginia, and comes out in Kentucky. The *Lincoln Memorial University*, adjoining the Gap, is attended by 400 students.

Railways also run from Knoxville to *Louisville* (p. 567), *Cincinnati* (p. 405), *Atlanta* (p. 571), etc.

The part of the Appalachians bounding the S. horizon at this part of our route is known as the **Great Smoky Mts.** (5-6000 ft.), familiar to the readers of *Charles Egbert Craddock's* novels. At (540 M.) *Loudon* (815 ft.) we cross and quit the *Tennessee River*. 564 M. *Athens* (975 ft.,) with the preparatory department of the University of Chattanooga (left; see p. 578).

At (591 M.) *Cleveland* (865 ft.; Artz Ho., $2), an industrial city with 3858 inhab., the railway forks, one branch running viâ Rome to Atlanta, Macon, and Brunswick (see p. 579), while our line leads viâ Chattanooga to Birmingham and New Orleans.

The line from Cleveland to Brunswick unites with that from Chattanooga to Brunswick at (15 M.) *Cohutta* (p. 579).

Farther on we cross the *Citico Creek* and thread a tunnel.

620 M. **Chattanooga** (675 ft.; *Patten*, R. from $1½; *Williams; Read Ho.*, with an excellent restaurant, R. from $1; *Southern Hotel*, $2½-3, these two near the Union Station; *Railway Restaurants*), the fourth city of Tennessee, with 30,154 inhab., lies on the left bank of the Tennessee, in the centre of a district rich in iron, coal, and timber. Its progress of late has been very rapid, and its manufactures (value in 1907, $30,000,000) and trade are of considerable importance. The river is navigable to this point during the greater part of the year, and railways diverge in all directions. A good view of the town may be had from the *Times Building*. The finest residences are in Oak Street. The *Jewish Synagogue* and the *Federal Building* are noteworthy. The large *University of Chattanooga* (Methodist) is attended by 725 students (incl. those at Athens, see p. 577). Gen. Grant's headquarters in 1863 (1st St., near Walnut St.) are denoted by a bronze tablet, and various other points of interest are also marked. In the *Union Station* is the locomotive 'General', used by the Andrews Raiders in 1862 (tablet).

Chattanooga was a point of great strategic importance during the Civil War, and several battles were fought in the neighbourhood (comp. p. xli). The best general idea of the military operations is obtained from *Lookout Mt. (2125 ft.), which rises to the S. of the city and commands a superb *View, extending into seven states. The top may be reached by carriage-road, or by an inclined plane with cable-railway, connecting with the electric tramway from the town, and ending near the Lookout Inn ($3-5; burned down in 1908). A tramway (*Views) runs from the head of the inclined plane along the crest of the mountain, skirting the point where the 'Battle above the Clouds' (p. xli) took place on Nov. 24th, 1863, to *Lula Lake*, *Sunset Rock*, and (3 M.) *Natural Bridge*. To the E. rises *Missionary Ridge* (also ascended by an electric tramway), which gave name to the battle of Nov. 25th, 1863. Another tramway (return-fare 25 c.) runs from the town across the ridge to the battlefield of *Chickamauga* (Sept. 19th-21st, 1863), perhaps the bloodiest battle of modern days (33,000 men killed or wounded out of 121,000 engaged). About 15 sq. M. of ground, including most of the three just-named battlefields, have recently been laid out as a National Park (*Park Hotel*, near Crawfish Springs, $2; carriages in waiting at the tramway terminus for drives over the battlefield). The Park may also be reached by the C. R. & S. R. R. from the Central Depot. Numerous memorial monuments have been erected, and the positions of the battle-lines and batteries have been marked, in many instances with the guns actually used in the battles. The Park contains 100 M. of drives. The battlefields can be well studied from the steel *Observation Towers* (70 ft.), erected on them. Those whose time is limited may drive to the National Cemetery, go on thence to Missionary Ridge, follow the Crest Road through the Park, and return viâ *Roseville* (20 M. in all). Other battlefields lie a little farther to the E. The pretty *Lulu Falls* are easily reached from Lookout Inn. — The *National Soldiers' Cemetery*, with 13,000 graves, lies to the E. of the city.

From Chattanooga to Brunswick, 429 M., *Southern Railway* in 13-14½ hrs. At (27 M.) *Cohutta* this line joins the line from Cleveland (see p. 578) and enters *Georgia*. — 80 M. **Rome** (*Cherokee*, $ 2-3), one of the chief cities of N. Georgia, with 7291 inhab. and considerable manufactures, is the junction of lines to Anniston (p. 572), Attala (see below), and other points. The railway now runs towards the S.E. and passes near several battlefields. — 154 M. **Atlanta**, see p. 571. From (205 M.) *Flovilla* a steam-tramway runs to *Indian Springs* (The Wigwam, $ 2½). — 242 M. **Macon**, see p. 611. — 281 M. *Cochran;* 300 M. *Eastman* (De Leitch Ho., $ 2), a winter-resort; 318 M. *Helena*. At (390 M.) *Jesup* we intersect the Atlantic Coast Line from Savannah to the S. (see R. 103 b) and at (410 M.) *Everett* the Seaboard Air Line (R. 103 c). — 429 M. **Brunswick** (*Oglethorpe*, from $ 3; Brit. vice-consul, *Mr. Rosendo Torras*), a rising cotton-shipping port and winter-resort, with 9081 inhab., is situated on the *Brunswick River*, near its embouchure in the Atlantic Ocean. The annual value of its exports and imports is about $ 30,000,000. The 'Wanderer', the last slave-ship to cross the ocean, landed her 500 slaves at Brunswick. Near by is the historic *St. Simon's Island* (Ocean View, $ 2), with the ruins of Fort Frederica, built by Oglethorpe, founder of Georgia, who defeated the Spaniards at this point in 1742. Steamer from Brunswick to Savannah and Florida, see p. 611.

From Chattanooga to Memphis, 310 M., *Southern Railway* in 10-11½ hrs. — The line enters *Alabama*, crosses the Tennessee at (30 M.) *Bridgeport*, and runs towards the W. 38 M. *Stevenson* is the junction of a line to Nashville (see below). 97 M. *Huntsville* (610 ft.; Huntsville Hotel. $ 2, open in winter only; Monte Sano, a summer-hotel on a spur of the Cumberland Mts., 1700 ft. above the sea, $ 2-4), with 15,000 inhab., was formerly the capital of the state. — We recross the Tennessee to (122 M.) **Decatur** (575 ft.; *Bismarck*, *American Hotel*, $ 2), a little iron-making city with various manufactures. Including the adjacent *New Decatur City* (New Decatur Hotel, $ 2) it has (1900) 7551 inhabitants. — 165 M. *Tuscumbia*, with the adjacent *Sheffield* and *Florence* (across the Tennessee), has an industrial population of 12,160. Before reaching (196 M.) *Iuka* (555 ft.) we leave the Tennessee and enter *Mississippi* (p. 574). — 217 M. *Corinth* was a place of some strategic importance in the War and was occupied by Gen. Beauregard after the two days' fight at Shiloh (10-12 M. to the N.; April 6-7th, 1862), in which Gen. Johnston lost his life and the Confederates were defeated by Grant and Buell. Afterwards Corinth was occupied by the Unionists under Rosecrans, who repelled a desperate attempt to take it (Oct. 3rd-4th, 1862). — 258 M. *Grand Junction*. — 310 M. **Memphis**, see p. 586.

From Chattanooga to Nashville, 151 M., *Nashville, Chattanooga, & St. Louis Railway* in 5-6 hrs. (fare $ 4.50; sleeper $ 1.50). — This line diverges to the right from the Southern Railway at (38 M.) *Stevenson* (see above) and runs to the N.W. through a picturesque district. 64 M. *Cowan* is the junction of a branch-line to (14 M.) *Monteagle* (scene of a large Sunday School Assembly), *Tracy City* (20 M.), and (27 M.) *Coalmont;* 69 M. *Decherd* of others to (86 M.) *Columbia* and (122 M.) *Gadsden;* 82 M. *Tullahoma* of another to (74 M.) *Ravenscroft;* and (96 M.) *Wartrace* of yet another to (8 M.) *Shelbyville* (Dixie, $ 2; 2236 inhab.). — 119 M. *Murfreesboro* (Jordan, $ 2-3; 4000 inhab.) was the scene of a costly Federal victory in the Civil War (1730 killed, 11,500 wounded; Confederate loss, about 11,000). — 151 M. **Nashville**, see p. 585.

From Chattanooga to *Lexington* and *Cincinnati*, see R. 92a.

Beyond Chattanooga the New Orleans train runs to the S.W. across Alabama on the tracks of the *Queen & Crescent Route* (see p. 575). This traverses the scene of the Indian Wars of 1811 and subsequent years. Many names and other features bear witness to the early French settlers (1805). 671 M. *Fort Payne* (875 ft.); 707 M. *Attalla* (530 ft.), the junction of lines to Decatur and Rome (see above).

763 M. **Birmingham** (605 ft.; *New Morris*, *Hillman*, *Florence*, R. from $1\frac{1}{2}$; *Metropolitan*, R. from $1\frac{1}{2}$), a busy manufacturing city in *Jones Valley*, founded in 1871 and containing 38,415 inhab. in 1900 (and very much larger with its suburbs), owes its rapid growth, phenomenal among southern cities, to the vicinity (3 M.) of *Red Mountain*, which contains inexhaustible stores of hematite iron ore in conjunction with abundant coal and limestone. Its activity is exhibited in large rolling mills, iron-furnaces, foundries, machine shops, a large basic steel mill, etc. (total value of products in 1900, $12,581,000). Railways (steam and electric) radiate hence in all directions. — 774 M. *Bessemer* (515 ft.; Grand Hotel, $2), founded in 1887, contained 6358 inhab. in 1900 and is already an iron-making place of considerable importance. — 819 M. *Tuscaloosa* (225 ft.; Hotel McLester, from $2), a characteristic old-time Southern town of the best type, at the head of steamboat-navigation on the *Black Warrior River*, has 5094 inhab. and is the site of the *University of Alabama* (470 students). Its residence-streets contain many fine old Colonial houses and are shaded with magnificent oaks. It carries on a large trade in agricultural produce. — At (895 M.) *Cuba* we enter *Mississippi*. — 916 M. **Meridian** (330 ft.; *Southern*, $2\frac{1}{2}$-3; *Grand Avenue*, R. $1), an industrial city with 14,050 inhab., is the junction of lines to *Vicksburg* (p. 587), *Corinth* (p. 579), and *Mobile* (p. 573). — We reach *Louisiana* (p. 575) at (1068 M.) *Nicholson*. In entering New Orleans we cross *Lake Pontchartrain* (p. 636) by a trestle-bridge about 7 M. long.

1112 M. **New Orleans**, see p. 631.

c. Via Seaboard Air Line and Atlanta.

1191 M. Railway in 36-38 hrs. (fares as at p. 575). Richmond, Fredericksburg, and Potomac R. R. from Washington to (116 M.) *Richmond;* Seaboard Air Line from Richmond to (695 M.) *Atlanta;* Atlanta & West Point R. R. from Atlanta to (870 M.) *Montgomery;* Louisville & Nashville R. R. from Montgomery to (1191 M.) *New Orleans*.

From Washington to (116 M.) *Richmond*, see R. 88; from Richmond to (139 M.) *Petersburg*, see p. 564. The line continues to run towards the S. 153 M. *Dinwiddie;* 163 M. *McKenney;* 180 M. *Cochran;* 195 M. *La Crosse;* 202 M. *Bracey*. We now enter *North Carolina*.

214 M. **Norlina**, a new and growing settlement, is the junction of the Seabord Air Line branch to *Portsmouth* and *Norfolk* (p. 562).

Our route runs towards the S.W. 217 M. *Ridgeway;* 229 M. *Henderson* (3746 inhab.), the junction of a line to Durham (p. 570); 246 M. *Franklinton;* 256 M. *Wake Forest*, with a large college.

272 M. **Raleigh** (315 ft.; *Yarborough House*, $2\frac{1}{2}$-5; *Park*, $2), the capital of North Carolina, with 13,643 inhab., lies on high ground near the centre of the state. The *State House* stands in *Union Square*, in the centre of the city. Among other large buildings are *St. Mary's College* (pleasant grounds), the *Peace Institute*,

the *Baptist University* (these three for girls), the *Agricultural & Mechanical College* (600 students), *Shaw University* (525 coloured students), the *State Insane Asylum*, the *State Geological Museum*, and the *Post Office*. A drive may be taken to the *Old*, *Confederate*, and *Federal Cemeteries* (views).

From Raleigh to *Durham* and *Greensboro*, to *Goldsboro*, and to *Norfolk*, see p. 570.

Beyond Raleigh our line continues towards the S.W. 303 M. *Moncure* is the junction of a short line to *Pittsboro*. — At (315 M.) *Sanford* we connect with the Atlantic Coast and Southern railways.

From (328 M.) *Cameron* a short branch diverges to (10 M.) *Carthage*. — 341 M. *Southern Pines* (600 ft.; Piney Woods Inn, $3-5; Southern Pines Ho., $2-4), a winter-resort, in the heart of the long-leaved pine belt of N. Carolina (average winter-temperature 44° Fahr.). — 345 M. *Aberdeen*.

From Aberdeen a branch-line runs towards the W., through peach-orchards, to (6 M.) Pinehurst (**Carolina*, from $4; *Berkshire*, from $2½; *Holly Inn*, $3; *Harvard*, $2½, open all the year round), a charming winter-resort among the pines, with a casino, a deer-park, three golf-courses, and other attractions. The most important winter golf tournaments in the country are held on the Pinehurst links. Shooting and tennis matches of some interest also occur. Few winter-resorts offer better athletic attractions.

370 M. *Hamlet* (Rail. Restaurant) is the point where the New Orleans line diverges from the Seaboard route to Florida (R. 103 b). At (395 M.) *Wadesboro* we intersect the Atlantic Coast Line. 423 M. *Monroe* is the junction of a line to (104 M.) *Rutherfordton*. Near (435 M.) *Waxhaw* we enter *South Carolina* (p. 571). At (447 M.) *Catawba* we intersect the Ohio River and Charleston Railway; at (467 M.) *Chester* we cross the Southern Railway from Charlotte to Columbia; and at (484 M.) *Carlisle* we cross the same railway's branch between Columbia and Spartanburg (p. 571). 513 M. *Clinton* is another point of connection with the Southern Railway System; 541 M. *Greenwood* and (556 M.) *Abbeville* connect both with the Southern Railway and with the Central of Georgia R.R. At (571 M.) *Calhoun Falls* we cross the *Savannah* and enter *Georgia* (p. 571). 588 M. *Elberton*. — 622 M. **Athens** (866 ft.; *Commercial*, *Windsor*, $2½), a small and picturesque town with 10,245 inhab., retains many characteristics of the Old South. It lies on the *Oconee River*, and is the educational centre of Georgia. It is the seat of the *University of Georgia* (2500 students), and among its other educational establishments may be mentioned the *Lucy Cobb Institute for Girls* and the *Georgia Normal College*. It is the junction of lines to Macon, Lula (p. 571), and various other points. — 660 M. *Lawrenceville*; 677 M. *Tucker*.

695 M. **Atlanta**, and thence to —

1191 M. **New Orleans**, see pp. 571-575.

92. From Cincinnati to New Orleans.

a. Viâ Chattanooga (*'Queen & Crescent Route'*).

830 M. Railway in 24-25 hrs. (fare $ 21; sleeper $ 5). Cincinnati, New Orleans, & Texas Pacific Railway to (338 M.) *Chattanooga;* Alabama Great Southern R. R. thence to (634 M.) *Meridian;* New Orleans & North Eastern R. R. thence to (830 M.) *New Orleans.* This line traverses the famous *Blue Grass Region* of Kentucky. — The distances on the mile-posts are calculated from Ludlow (see below).

Cincinnati, see p. 405. The train crosses the *Ohio* to (3 M.) *Ludlow* (to the right, the pleasure-grounds known as the *Lagoon*, p. 406) and runs through *Kentucky* (p. 567). The country traversed is pleasant, but few of the stations are important. 21 M. *Walton* (905 ft.); 52 M. *Hinton* (948 ft.); 70 M. *Georgetown* (870 ft.).

82 M. **Lexington** (965 ft.; *Phoenix*, $ 3-4, R. from $ 1; *Leland*, $ 2-3, R. from 75 c.), a thriving little town with 26,369 inhab., is the metropolis of the famous *Blue Grass Country* (see below) and one of the chief horse and cattle markets in the United States. It received its name from having been founded in the year of the battle of Lexington (p. 308). It is the site of the *University of Kentucky* (1110 students, including the commercial college) and the *State Agricultural & Mechanical College* (600 students), and has large distilleries of 'Bourbon' whiskey. *Henry Clay* (p. 555) is commemorated by a monument. The trotting-races held here are largely frequented; the famous track of the Kentucky Horse Breeders' Association (p. xciii) is opposite the railway-station.

From Cincinnati to Lexington by the *Louisville & Nashville R. R.*, see R. 92b. — From Lexington to *Washington*, see R. 90; to *Louisville*, see pp. 567, 569.

The **Blue Grass Region**, which occupies about 10,000 sq. M. in N. Kentucky, is an undulating and fertile plateau surrounded by hills. The soil is very rich, and agriculture, especially the raising of tobacco and hemp, is carried on with great success. Its characteristic feature, however, consists of the celebrated pastures of 'Blue Grass' (*Poa pratensis*), which support the horses and other livestock for which Kentucky is famous. Stock farms abound throughout the whole district, especially in the neighbourhood of Lexington. The American trotting horse was here brought to its present high state of excellence, the blood horses of Kentucky exhibiting a remarkable combination of speed and endurance. Among the most famous stock farms near Lexington is *Ashland* (1½ M.), formerly the home of Henry Clay and now the property of his granddaughter, Mrs. H. C. McDowell. 'Mambrino Chief' and 'Dictator', two of the most famous sires of the American stud-book, were Ashland horses. *Woodburn*, 15 M. from Lexington, was the home of the famous thorough-bred 'Lexington' and the birthplace of 'Maud S.' who trotted a mile in 2 min. 8¾ sec. 'Nancy Hanks', who trotted a mile in 2.4, was bred by Mr. Hart Boswell at *Poplar Hill*, 7 M. to the N. of Lexington. The home of Mr. J. B. Haggin, 4 M. from Lexington is the handsomest residence in the State and cost $ 100,000; it is surrounded by 4000 acres constituting one of the largest and finest stock-farms in the world. *Paris*, on the Ken. Central R. R., 19 M. to the N.E. of Lexington, is another centre of racing stock. *Castleton*, with Mr. James R. Keene's stud-farm, is 5 M. distant from Lexington.

At *Berea* (Daniel Boone Hotel, $ 2-3), 50 M. to the S. of Paris (see above) on the same railway, is the *Berea College*, which is doing such admirable work for the Kentucky mountain-folk (1150 students).

At (103 M.) *High Bridge* (765 ft.) the train crosses the *Kentucky River* by a fine *Bridge, 280 ft. high, with three spans of 375 ft. each (view). A cave in the cliff near the bridge is said to have been occupied by Daniel Boone, the famous pioneer. — 116½ M. *Danville* (955 ft.), with the Presbyterian *Central University* (700 students). 121 M. *Junction City* (985 ft.). At (138 M.) *King's Mountain* (1170 ft.) we pass through a tunnel 1300 yds. long. 161 M. *Somerset* (870 ft.). At (168 M.) *Burnside* (770 ft.) we cross the *Cumberland River* (view). The line here runs high up on the cliffs. 181 M. *Beaver Gap* is the station for the (1 M.) *Natural Bridge* of Kentucky, which is 30 ft. high and has a span of 60 ft. From (182 M.) *Cumberland Falls Station* (1250 ft.) coaches run to (12 M.) **Cumberland Falls*, 60 ft. high. Beyond (197 M.) *Pine Knot* (1410 ft.) we enter *Tennessee* (the 'Volunteer State'), where the line traverses the picturesque district of the foot-hills of the *Cumberland Mts.*, among which are numerous summer-resorts. Beyond (210 M.) *Oneida* we reach the highest point on the line (1515 ft.). 224 M. *Rugby Road* (1390 ft.) is the station for *Rugby* (8 M. to the W.; 1400 ft.), founded in 1880 by Tom Hughes (author of 'Tom Brown's School-Days') and partly colonized by Englishmen. 232 M. *Sunbright* (1350 ft.), on the *Cumberland Plateau;* 254 M. *Oakdale* (800 ft.; Babahatchie Inn), on the *Emory River*, along which the train descends. — 258 M. *Harriman* (Cumberland, $2), an iron-making place, is 15 M. from *Alum Springs*, a favourite resort amid the Cumberland Mts. It is the junction of the Southern Railway line to Knoxville and Asheville (comp. p. 577). — 283 M. *Spring City;* 300 M. *Dayton* (700 ft.). Between (329 M.) *Hixon* and (334 M.) *Boyce* (680 ft.) we cross the *Tennessee River*. The battlefield of Missionary Ridge (p. 578) is seen to the left.

338 M. **Chattanooga** (675 ft.), and thence to —

830 M. **New Orleans**, see pp. 578-580.

b. Viâ Louisville and Nashville.

925 M. Louisville & Nashville Railroad in 25-30 hrs. (fare $21; sleeper $5; free reclining chair car).

Cincinnati, see p. 405. The train crosses the *Ohio* to (2 M.) *Newport* (p. 408) and runs to the S.W. through *Kentucky*. At (21 M.) *Walton* we cross the route above described. 83 M. *Lagrange* is the junction of lines to (66 M.) *Lexington* (p. 582), etc. 98 M. *Anchorage*.

114 M. **Louisville**, see p. 569. The train now runs towards the S. — From (136 M.) *Bardstown Junction* a line runs to (37 M.) *Springfield* (Ky.), and from (143 M.) *Lebanon Junction* another runs to *Lebanon* and *Knoxville* (p. 577). At (19 M.) *Gethsemane*, on the latter line, is the only Trappist monastery in the United States. — From (204 M.) *Glasgow Junction* a short line diverges to *Mammoth Cave* (see p. 584).

From Glasgow Junction to Mammoth Cave, 9 M., railway in 3/4-1 hr. (return-fare $ 2). At present there are three trains daily. By automobile-stage the return-fare is $ 1. — At the end of the railway, on the *Green River*, at a height of 900 ft. above the sea, stands the *Mammoth Cave Hotel* ($ 2), 300 yards from the cave. Guides, etc., are procured at the hotel. About 7000 tourists visit the cave yearly. [Some of these come by steamer up the Green River from *Henderson*, on the Ohio (ca. 10 M. to the S. of Evansville, p. 417), landing at a wharf 1/2 M. from the mouth of the Mammoth Cave.]

The *Mammoth Cave of Kentucky, familiar to surveyors before 1800, is the largest cave known, extending below the earth for 9-10 M., while the various avenues have an estimated length of about 100 M. The carboniferous limestone of Kentucky, in which the cave occurs, occupies an area of 8000 sq. M., and Prof. Shaler estimates that there are at least 100,000 miles of open caverns beneath it. Mammoth Cave is really a congeries of many caves, the walls or floors of which have worn through into each other. It exists in five distinct tiers or levels. The interior contains numerous avenues, halls, domes, pits, lakes, rivers, and the like, to which more or less appropriate names have been given. There are comparatively few stalactites or stalagmites, but some of those found here are of great size. Two regular routes † have been established, over which guides conduct visitors at stated times, but those who wish to make a more leisurely exploration can make special arrangements. The *Long* or *River Route* (ca. 15 M.; fee $ 2, both routes $ 3) includes (besides parts of the Main Cave) Fat Man's Misery, Dead Sea, Lake Lethe, the Styx, Echo River, and beyond this a region with singularly fine floral crystals *(Oulopholites)*, ending in an enormous pit known as the Maelstrom; the return is made by the Corkscrew. The *Short* or *Pits and Domes Route* (8 M.; $ 2) takes in the Rotunda, the Saltpetre Works (see below), Audubon Avenue, Olive's Bower, Gothic Avenue, Giant's Coffin, Star Chamber, Bottomless Pit, Gorin's Dome, and Pensico Ave. The pure air and even temperature (54° Fahr.) make these excursions less fatiguing than they would be above ground. Visitors often accomplish the Short Route on the evening of their arrival (7-11 p.m.) and the Long Route on the following day (9 a.m.-6 p.m.). Luncheon is carried in from the hotel. Special fees are charged for visits to the Chief City (540 ft. long, 280 ft. wide, and 120 ft. high); to a new region opened up in 1907, including Hovey's Cathedral Domes, five in number; and to a series of ten domes (finest called the Violet Dome), discovered in 1908 beyond the part of the cave known as Ultima Thule. The fees include the fireworks necessary to illuminate the domes and chasms. The 50 varieties of animal life found in the cave include eyeless fish *(Amblyopsis spelaeus)* and blind craw-fish *(Cambarus pelucidus)*. It contains large deposits of nitrous earth, from which saltpetre was made in 1811-15. A good account of the Mammoth Cave, by *H. C. Hovey* and *R. E. Call* (50 c.), and a map (1907; 25 c.), by *Hovey*, are sold at the hotel. Use of cave suit 15 c. — A visit may also be paid to the **Colossal Cave*, *White Cave* ($ 1), and *Dixon's Cave*, with fine stalactites, which have not (like those in the Mammoth Cave) been blackened by smoke. The Colossal Cave ($ 2, including guide and lights; map, by *Dr. Hovey*, free), discovered in 1895, is 1 1/2 M from the Mammoth Cave and may be explored in 5 hrs. It contains immense domes, chalybeate springs, and remarkable pools, and is rich in stalactites and helictites.

228 M. *Bowling Green* (Rail. Restaurant; 8226 inhab.). At (232 M.) *Memphis Junction* the line forks, one branch running to the S.W. (right) to *Memphis* (p. 586), while the other holds on nearly due S. Near (254 M.) *Mitchellville* we enter *Tennessee* (p. 583). 289 M. *Edgefield Junction*, for the line to St. Louis (p. 410).

† It is announced that in and after 1909 there will be *four* routes, so as to include the most striking of the recent discoveries.

301 M. **Nashville** (550 ft.; *Hermitage*, new; *Maxwell Ho.*, R. from $1; *Duncan*, $3-5; *Tulane*, from $2; *Utopia*), the 'Rock City', the capital of Tennessee, with (1900) 80,865 inhab. (now ca. 140,000), occupies a somewhat hilly site on both banks of the *Cumberland River*. It contains extensive manufactories of hard-wood wares, large flour-mills, and various other industries (value of products in 1906, $ 25,750,000), and it is, perhaps, the most important educational centre in the South. The most prominent building in the city is the *State Capitol* (with a tower 205 ft. high), conspicuously situated on a hill. In its grounds are a bronze *Equestrian Statue of Andrew Jackson*, by Clark Mills, and the *Tomb of President Polk* (1795-1849), whose home *(Polk Place)* stood at the corner of Vine and Union Sts. Among the other chief buildings are the *Court House*, the *Custom House*, the *Parthenon* (used for exhibitions of art, Greek plays by students, etc.), the *Vendome* and *Bijou Theatres*, the *Carnegie Library*, the *Board of Trade*, the *First National Bank*, and the *Stahlman Building*.

At the head of the educational institutions stands the large Vanderbilt University, endowed by Cornelius Vanderbilt with $ 1,000,000 and attended by 885 students. In the Campus is a colossal statue of the founder, by Moretti. The Thurston Archæological Collection includes rare and excellent examples of prehistoric American pottery, many of them found near Nashville. — The academic department of the *University of Nashville* (1450 students) has been converted into the *Peabody Teachers' College* (945 students).

The *Fisk University* (550 students), the *Roger Williams University* (250 students), and the *Walden University* (925 students) are the leading seats of learning for coloured persons. Other large schools are *Boscobel College*, *Belmont College*, the *Saint Cecilia Academy*, *Radnor College*, *Buford Academy*, and *Ward's Seminary*. The *Watkins Institute* contains a good library and the interesting collections of the *Tennessee Historical Society*. — In 1897 the *Tennessee Centennial Exposition* was held in the W. suburbs of Nashville; and some of its handsome buildings have been left standing in *Centennial Park*.

Among the places of interest near Nashville are the *Hermitage*, the home of *Gen. Andrew Jackson* (1767-1845), 11 M. to the E. (on the railway to Lebanon, p. 583); *Belle Meade*, a famous stock-farm, 6 M. to the S.W., now owned by the heirs of the late Gen. W. H. Jackson (Iroquois, the American winner of the Derby, was bred here); and the *National Cemetery*, 4½ M. to the N., containing 16,700 graves. — In the *Battle of Nashville*, fought on Dec. 15-16th, 1864, Gen. Hood, at the head of a Confederate army, was completely defeated by Gen. Thomas.

Lines radiate from Nashville to *St. Louis* (p. 410), *Hickman* (p. 430), *Memphis* (p. 586), *Chattanooga* (p. 578), etc.

The line continues to run towards the S. 347 M. *Columbia*, on the *Duck River*. At (394 M.) *State Line* we enter *Alabama* (p. 572). At (422 M.) *Decatur* (p. 579) we cross the *Tennessee*. 455 M. *Cullman;* 508 M. *Birmingham*, see p. 580; 541 M. *Calera*.

604 M. *Montgomery*, and thence to (784 M.) *Mobile* and —

925 M. **New Orleans**, see pp. 573-575.

c. Viâ Louisville and Memphis.

919 M. Railway in 26-27 hrs. (fare $21; sleeper $5). This route follows the *Baltimore & Ohio South-Western Railway* to (130 M.) *Louisville*, and the *Illinois Central Railroad* thence to New Orleans.

Cincinnati (Central Union Station), see p. 405. — The train runs at first towards the W. 5 M. *Culloms.* Beyond (15 M.) *North Bend* we enter *Indiana* (p. 357). 22 M. *Lawrenceburg;* 26 M. *Aurora;* 52 M. *Osgood;* 59 M. *Holton.* — 72 M. **North Vernon** (*Commercial Ho.*, $2), with 2823 inhab., is a junction of some importance. Our line now bends to the S. — 85 M. *Paris;* 97 M. *Lexington;* 118 M. *Watson;* 126 M. *New Albany* (p. 417). We now cross the *Ohio* and enter *Kentucky* (p. 567). — 130 M. **Louisville**, see p. 567.

Beyond Louisville the line runs at first towards the S.W. 177 M. *Cecilia;* 202 M. *Leitchfield.* Beyond (248 M.) *Rockport* we cross the *Green River.* 257 M. *Central City;* 310 M. *Princeton;* 324 M. *Kuttawa.* A little farther on we cross the *Cumberland* and soon after the *Tennessee*, which here (15-20 M. above their mouths in the Ohio) approach within 3-4 M. of each other.

357 M. **Paducah** (*Palmer Ho.*, $3), a city of 19,446 inhab., lies on the left bank of the *Ohio*, a little below the influx of the Tennessee. It carries on a brisk trade in tobacco, grain, and pork. — Our line now turns abruptly to the S. (left).

At (403 M.) **Fulton** (*Usona Hotel*, $2-2½) we reach the line from Chicago to New Orleans described in R. 93. Some of the trains from Cincinnati to New Orleans also follow the route viâ Jackson (comp. p. 588). We now enter *Tennessee.* — Beyond (427 M.) *Obion* we cross the *Obion River;* beyond (447 M.) *Dyersburg* the two branches of the *Forked Deer River;* and beyond (477 M.) *Henning* the *Big Hatchee.* 486 M. *Covington;* 513 M. *Woodstock.*

523 M. **Memphis** (270 ft.; **Gayoso*, *Peabody*, R. from $1½; *Gaston*, from $2, R. from $1; **Luehrman's*, for men, R. from $1½; *Cordova*, $2-4; *Clarendon*, *Fransioli*, $2-2½), the first city of Tennessee and the most important on the *Mississippi* between St. Louis and New Orleans, is strikingly situated on the *Chickasaw Bluffs*, with a wide levee overlooking the river. It is one of the most progressive cities in the S., and its population increased from 33,593 in 1880 to 102,320 in 1900 (now probably at least 150,000). It is of great importance as a distributing point for cotton (8-900,000 bales), lumber (500,000,000 ft.), groceries, shoes, hardware, and other commodities. Several railways converge here (comp. pp. 579, 588) and many lines of steamers ply up and down the Mississippi (comp. p. 431). The railway-bridge (1892) is the only bridge across the Mississippi to the S. of St. Louis.

The *Cotton Exchange*, the *Merchants' Exchange*, the *Custom House*, the *Office of the Appeal-Avalanche*, the *St. Agnes Academy*, the *Tennessee Club*, the *Chickasaw Club*, the *Auditorium* (7000 seats), the *Tennessee Trust Building*, the *Memphis Trust Building*, the *Porter*

Building, the *Goodwyn Institute*, and the *Cossett Free Library* are among the most conspicuous buildings. The *Levee* presents a busy and animated picture, and interesting visits may be paid to the various *Cotton Compresses* (in which bales of cotton are prepared for transportation by being reduced by hydraulic pressure to one-fourth their original size) and *Cotton-seed Oil Mills*. *Court Square* contains a bust of Gen. Andrew Jackson and innumerable squirrels.

An electric tramway runs from Memphis to (5 M.) the *National Cemetery*, with the graves of 14,000 Union soldiers, and (11 M.) *Raleigh*, a pleasant resort. — Memphis also possesses two *Race Courses*. — Steamers ply viâ the *White River*, *St. Francis River*, and *Arkansas River* to *Fort Smith* and other points in Arkansas.

From Memphis to New Orleans viâ Vicksburg, 455 M., *Yazoo & Mississippi Valley R. R. (Ill. Central System)* in 14 hrs. (fare $ 11.85; sleeper $ 2.50). This line forms an alternative route from Memphis to New Orleans. The train starts at the *Calhoun St. Station* and soon after leaving Memphis enters *Mississippi* (p. 574). 13 M. *Lake View* (lake to the right). Beyond (45 M.) *Clayton* we pass *Beaver Dam Lake* and *Beaver Dam Bayou*. 56 M. *Lula*, near *Moon Lake* — 63 M. *Coahoma* is the junction of a loop-line to (77 M.) *Lamont* and (115 M.) *Hampton*, rejoining the main line at (126 M.) *Rolling Fork* (see below). To the left lies *Swan Lake*. — 139 M. *Leland*. We now follow the *Deer River*. — 176 M. *Rolling Fork* (see above); 209 M. *Redwood*, on the *Old River;* 217 M. *National Cemetery*.

219 M. **Vicksburg** (*Carroll*, $ 2½-4; *Piazza*, R. from $ 1), picturesquely situated on the Mississippi, amid the *Walnut Hills* (500 ft.), is the largest city in the state and a commercial and industrial place of some importance. Pop. (1900) 14,834. The name of Vicksburg is well known from its prominence in the Civil War, when, as the key of the Mississippi, it was strongly fortified and garrisoned by the Confederates. After baffling Farragut and Sherman in 1862, it was finally captured by Grant in 1863 (July 4th), in a campaign which cost him 9000 men (comp. pp. xli, 195). The *National Cemetery* above the city contains 16,600 graves (many good monuments).

Near (244 M.) *Ingleside* we cross the *Big Black River*, and near (249 M.) *Port Gibson* the *Pierre*. — From (269 M.) *Harriston* a line runs to (28 M.) **Natchez** (*Natchez*, $ 3-5; *Pearl*, $ 2), a city of 12,210 inhab., founded by *D'Iberville* in 1700, and situated on and at the foot of a bluff rising 200 ft. above the river. It takes its name from a now extinct tribe of Indians, who were among the noblest specimens of Red Men in America. Some traces of the old French fort are still visible. A *National Cemetery* adjoins the city.

Beyond Harriston we cross several small rivers. Near (326 M.) *Whitaker* we enter *Louisiana* (p. 575). — 366 M. **Baton Rouge** (*Mayer Hotel*, from $ 2½, R. from $ 1), the capital of Louisiana, is a quaint old place with 11,269 inhab., on a bluff above the Mississippi. It contains the *Louisiana State University* (550 students) and other State institutions. — Beyond Baton Rouge we skirt the Mississippi, with its low banks and levees, sugar-plantations, and picturesque planters' houses. 444 M. *Kenner*.

455 M. **New Orleans**, see p. 631.

Trains also run from Memphis to New Orleans by the so-called 'Frisco System', following the Birmingham line to (105 M.) *Tupelo*, running thence to the S. over the Mobile & Ohio R. R. to (249 M.) *Meridian* (p. 580) and thence by the New Orleans & North-Eastern R. R. to (445 M.) *New Orleans* (p. 631).

After calling in Memphis at the *Poplar St.* and *Calhoun St. Stations*, the through-train from Cincinnati to New Orleans runs towards the S.E. 536 M. *Horn Lake;* 542 M. *Nesbitt;* 573 M. *Sardis;* 603 M. *Oakland*. — At (623 M.) *Grenada* (p. 588) we join the main line from Chicago. Hence to —

919 M. **New Orleans**, see pp. 588, 589.

93. From Chicago and St. Louis to New Orleans.

Illinois Central R. R. from *Chicago* to (922 M.) *New Orleans* in 26 hrs. (fare $ 23; through-sleeper $ 6); from *St. Louis* to (710 M.) *New Orleans* in 20½-24½ hrs. (fare $ 18; sleeper $ 5).

The train from St. Louis runs viâ *Belleville* and *Pinckneyville* and joins the Chicago line (described below) at (95 M.) *Carbondale* (see below).

From Chicago to (81 M.) *Gilman*, see R. 58a. Our line continues to run towards the S. 102 M. *Paxton;* 112 M. *Rantoul* (see p. 399). — 126 M. **Champaign** *(Beardsley*, $ 2-3; *Rail. Restaurant)*, junction of a line to Decatur (p. 401), is, with the adjoining city of **Urbana** (*Columbian*, $ 2; joint pop. 15,000), the seat of the *University of Illinois* (4600 students), one of the most enterprising and flourishing of the State Universities of the West. — 136 M. *Tolono;* 156 M. *Arcola;* 171 M. *Mattoon;* 198 M. *Effingham;* 213 M. *Edgewood;* 243 M. *Odin;* 251 M. *Centralia* (Rail. Restaurant), one of the chief outlets of a rich fruit-growing country (6721 inhab.); 287 M. *Du Quoin*, the junction of lines to *El Dorado* and St. Louis (p. 410). — At (307 M.) *Carbondale*, a busy little industrial town (3318 inhab.), we are joined by the line from St. Louis (see above). 327 M. *Anna* adjoins *Jonesboro*, a busy market for fruit and cotton. From (355 M.) *Mounds* a branch-line runs to (3 M.) *Mounds City*.

360 M. *Cairo Junction*, for the short branch-line to (3½ M.) *Cairo* (see below).

Cairo (*Halliday*, $ 2-5; *Planters*, R. from $ 1), a manufacturing city with 12,566 inhab., lies on a low flat tongue of land at the confluence of the *Mississippi* and *Ohio*. In one of its squares is a heroic bronze figure of 'The Hewer', by *G. G. Barnard*. Cairo is said to be the 'Eden' of 'Martin Chuzzlewit'.

The train crosses the Ohio by a fine bridge and enters *Kentucky* (p. 567). 393 M. *Clinton*. At (407 M.) *Fulton* (p. 586) we are joined by the line from Cincinnati and Louisville (R. 92 c) and enter *Tennessee* (p. 583). The railway forks here, the right branch running to Memphis, while the left runs viâ Jackson (Tenn.) to Grenada (see below). The through-trains from Chicago, Cincinnati, and St. Louis to New Orleans follow the former route.

Jackson (*Capitol*, R. from $ 1; *Southern*, $ 2), with 14,511 inhab., is a considerable cotton-market and carries on various industries. It lies 65 M. to the S. of Fulton, and beyond it the line goes on viâ (112 M.) *Grand Junction* and (136 M.) *Holly Springs* (Rail. Restaurant) to (211 M.) *Grenada*, where it unites with the main line described in this route.

From Fulton our train runs towards the S.W. 424 M. *Moffatt;* 456 M. *Dyersburg;* 481 M. *Henning;* 510 M. *Millington*.

528 M. **Memphis** (Rail. Restaurant), see p. 586. We stop here first at the Poplar St. and then at the Calhoun St. station. Two routes run hence to New Orleans, one viâ Vicksburg (p. 587), the other viâ Grenada. Our train follows the latter and runs towards the S.E. — 550 M. *Hernando;* 577 M. *Sardis;* 606 M. *Oakland*. — At (628 M.) *Grenada*, on the *Yalobusha River*, we rejoin the route we

left at Fulton (see p. 587). 681 M. *Durant;* 716 M. *Canton.* — 739 M. **Jackson** (*Edwards Ho.*, R. from $ 1), the small capital of Mississippi (7816 inhab.), has a handsome *State House* and other public buildings. — 793 M. *Brookhaven;* 817 M. *McComb City.* — Beyond (835 M.) *Osyka* we enter *Louisiana.* 869 M. *Hammond.* In approaching New Orleans we cross the outlet of *Lake Maurepas* (right) and skirt *Lake Pontchartrain* (left). 915 M. *Pacific Junction.*

922 M. **New Orleans**, see p. 631

94. From St. Louis to Texarkana.

490 M. St. Louis, Iron Mountain, and Southern Railway in 16-22 hrs. (fare $ 14.80; sleeper $ 3.50). Through-carriages run by this line to *Arkansas Hot Springs*, *Fort Worth*, *San Antonio*, *Laredo*, *Dallas*, *Houston*, *Galveston*, and *El Paso* (for *Los Angeles* and *San Francisco* viâ Texas Pacific Railway).

St. Louis, see p. 410. The line runs to the S. along the W. bank of the *Mississippi* as far as (27 M.) *Riverside.* It then leaves the river and runs to the S.W. through the great mineral district of E. Missouri. From (61 M.) *Mineral Point* (860 ft.) a branch-line runs to (4 M.) *Potosi*, with several lead-mines. At (75 M.) *Bismarck* (1025 ft.; Rail. Restaurant) the railway forks, the left branch leading to *Columbus* (Ky.; p. 430), while the Texas line runs nearly due S. About 6 M. farther on the famous **Iron Mt.** (1075 ft.) is seen to the left.

This is an irregular hill, consisting mainly of porphyry, intersected by numerous mineral veins and capped with a deposit of specular iron ore, 6-30 ft. thick and yielding nearly 70 per cent of pure iron. The amount of mineral already taken from this hill exceeds five million tons.

Pilot Knob (1015 ft.), seen on the same side, 6 M. farther on, also contains a wonderful bed of iron ore, 12-30 ft. thick. 88 M. *Ironton* (910 ft.) uses the fine magnetic ore of *Shepherd Mt.*, which is free from phosphorus and sulphur. The line now passes through the charming *Valley of Arcadia* and then intersects the *Ozark Mts.* (good views). 166 M. *Poplar Bluff* is the junction of a line to (71 M.) *Bird's Point*, opposite *Cairo* (p. 588). Beyond (181 M.) *Neelyville* (305 ft.), the junction of a line to (20 M.) *Doniphan*, we enter *Arkansas* ('Bear State'; pron. 'Arkănsaw'). At (199 M.) *Knobel* (270 ft.) the through-carriages to *Memphis* (p. 586) diverge to the left. 225 M. *Walnut Ridge* (Rail. Restaurant). At (262 M.) *Newport* (230 ft.) we cross the *White River* (p. 431).

From Newport to Joplin, 288 M., railway in 13 hrs. This line ascends through the picturesque *White River Valley.* — 32 M. *White River Junction*, for a branch to (10 M.) *Cushman;* 125 M. *Cotter;* 159 M. *Bergman;* 191 M. *Branson;* 211 M. *Galena;* 241 M. *Crane*, junction of a branch to (34 M.) *Springfield.* At (232 M.) *Aurora* we cross the Rock Island railway (Frisco System). 271 M. *Carthage.* — 283 M. **Joplin** (*Connor*, from $ 2½, R. from $ 1), a mining city.

288 M. *Bald Knob*, the junction of a line to (91 M.) *Memphis* (p. 586).

346 M. **Little Rock** (260 ft.; *Marion*, R. from $1; *Capitol*, $2½-4; *Gleason*, R. from $1; *Rail. Restaurant*), the capital and largest city of Arkansas, with (1900) 38,307 inhab., is well situated on the wide *Arkansas River* and carries on a large trade in cotton and other goods both by railway and steamer. It is regularly laid out, and many of its streets are pleasantly shaded by magnolias. The principal buildings include the *State House*, the *U. S. Court House*, the *County Court House*, the *State Insane Asylum*, the *Deaf-Mute Institute*, the *School for the Blind*, the *Post Office*, the *Board of Trade Building*, *Little Rock University*, and the *Medical Department of Arkansas Industrial University*. Railways radiate hence in all directions.

369 M. **Benton** (*Van Noy*, $2-2¼) is the junction of a branch-line to (25 M.) the famous *Arkansas Hot Springs*.

The town of Hot Springs, Arkansas (425 ft.; **Arlington*, from $4; *Eastman*, from $4; *Park*, from $3; *Majestic*, from $3; *Waverly*, $2½-3; *Great Northern*, R. from $2½; *Waukesha*, *Pullman*, $2-3; *Imperial*, small, well spoken of, $2), with (1900) 9973 inhab., is situated in a narrow gorge between *Hot Springs Mt.* and *West Mt.*, in a spur of the *Ozark Mts.*, and has become one of the most frequented health and pleasure resorts in America. The wide main street is flanked on one side with hotels and shops and on the other with a row of handsome bath-houses. The *Springs*, of which there are about 50, rise on the W. slope of Hot Springs Mt., above the town, vary in temperature from 76° to 158° Fahr., and discharge daily ca. 1,000,000 gallons of clear, tasteless, and odourless water. They are used both internally and externally, and are beneficial in rheumatism, gout, neuralgia, and affections of the skin and urinary organs. They contain a little silica and carbonate of lime; but the efficacy of the water is ascribed mainly to its heat, purity, and radio-activity. The price for a single bath is 20-50 c., for 21 baths $3-10. The ground on which the springs rise is the property of the U. S. Government, and a large *Army and Navy Hospital* has been erected here for the use of officers, soldiers, and sailors. Among the numerous pleasant points for walks, rides, and drives in the vicinity of the Hot Springs are the *Valley of the Ouichita*, the *Ostrich Farm*, *Gulpha Gorge*, *Hell's Half Acre*, *Happy Hollow*, *Ball Bayou*, *Crystal Mt.*, and *Whittington's Peak*. Other amusements include golf, horse-racing, shooting, and fishing. There are several other mineral springs within easy reach, the chief of which are *Potash Sulphur Springs*, *Ozark Lithia Springs*, and *Mountain Valley Springs*, each with a hotel.

388 M. *Malvern* (260 ft.; Commercial, $2), the junction of another line to (25 M.) Arkansas Hot Springs (see above); 410 M. *Daleville;* 426 M. *Gurdon*, the junction of lines to Arkansas City (p. 431) and *Fort Smith;* 458 M. *Hope* (360 ft.), the junction of a line to (25 M.) *Nashville*.

490 M. **Texarkăna** (300 ft.; *Cosmopolitan*, R. $1; *Huckins*, $2), a town with 4914 inhab., on the border of Texas and Arkansas, is an important railway-junction, from which connection can easily be made for all important points in Texas, viâ the Texas and Pacific and other railways (comp. p. 596).

95. From El Paso to New Orleans.

1196 M. Southern Pacific Railway ('Sunset Route') in 46-48 hrs. (fare $33.15; sleeper $7, tourist-car $3.50). For through-service from San Francisco, see p. 549.

El Paso (3710 ft.; *Angelus*, from $2\frac{1}{2}$, R. from $1; *Sheldon*, $3-5, R. $1\frac{1}{2}$-$2\frac{1}{2}$; *Orndorff*, $2\frac{1}{2}$-$3\frac{1}{2}$; *Pierson*, R. from $1; *Rail. Restaurant*), a city of 15,906 inhab., with silver-smelting works, cattle-yards, iron-foundries, and railroad-shops, is situated on the left bank of the Rio Grande. It is the chief gateway of the trade between the United States and Mexico, and 'the Pass' to everywhere, being the S. terminus of the A. T. & S. F. line (R. 75 b), the W. terminus of the Texas & Pacific Railway (R. 110), the N. terminus of the Mexican Central Railway (R. 113), the E. terminus of the El Paso & South-Western Railway, and a junction of the Rock Island system. Just across the river is the Mexican town of *Ciudad Juarez* or *El Paso del Norte* (see p. 645), connected with El Paso by an 'international' tramway. — Railway time changes here from the 'Pacific' to the 'Central' standard (2 hrs. faster); local time accords with the 'Mountain' standard (comp. p. xiv).

From El Paso to *Kansas City*, by the Rock Island Route, see R. 76 b.

The line rises and falls, as it follows the general course of the Rio Grande, here forming the boundary between Texas and Mexico. Antelopes are occasionally seen from the train and prairie-dogs frequently. 12 M. *Ysleta* (3650 ft.); 53 M. *Fort Hancock* (3515 ft.); 92 M. *Sierra Blanca* (4510 ft.), a junction with the Texas Pacific Railway (p. 638); 160 M. *Valentine* (4420 ft.); 196 M. *Marfa* (4690 ft.), the main depot for *Fort Davis*, a little to the N., the centre of a district for large game, including bears, panthers, and mountain-lions. — At (210 M.) *Paisano* (5080 ft.) we reach the highest point on the Southern Pacific Railway between San Francisco and New Orleans (1155 ft. higher than the Tehachapi Pass, p. 530). Fine mountain-scenery in the distance. — 270 M. *Haymond* (3880 ft.); 315 M. *Sanderson* (2775 ft.; Rail. Restaurant); 388 M. *Langtry* (1315 ft.), a military post. The Rio Grande is again in sight. Beyond (400 M.) *Shumla* (1410 ft.) we cross the *Pecos River* by a fine cantilever bridge, 2184 ft. long and 321 ft. high (one of the highest railway-bridges in the world). To the S., between the Pecos and Devil's River, in a canyon of the *Rio Grande*, lies the *Painted Cave*, a large cavern with some undeciphered Indian hieroglyphics. As we approach (438 M.) *Devil's River* (965 ft.) we see, to the left, the singular *Palisades*, in the *Castle Rock Canyon*. Beyond (453 M.) *Del Rio* (950 ft.; Del Rio Hotel, $2), we leave the Rio Grande and traverse a cattle-raising district. — From (489 M.) *Spofford Junction* (1015 ft.) a line runs to (35 M.) *Eagle Pass*, the starting-point of the *Mexican International Railway* route to Mexico (see p. 644). 529 M. *Uvalde* (935 ft.); 582 M. *Dunlay* (1000 ft.).

623 M. **San Antonio.** — HOTEL MENGER, from $ 3, well spoken of; SOUTHERN, $ 2½-4; BEXAR, $ 2-4, simple; ST. JAMES; NEW MAVERICK, R. from $ 1; MAHNCKE, from $ 2; HOT SULPHUR WELLS HOTEL, near the town, open in winter only, $ 3-5. — Good restaurant at the *Bexar Hotel*; *Torreon's Restaurant*; *Rail. Restaurant.*

San Antonio (675 ft.), the chief city of Texas and the 'cradle of Texas liberty', is a well-built city, of a distinctly Spanish cast, situated on the *San Antonio River*, which, with its small affluent the *San Pedro*, divides the city into three parts, and by its windings gives occasion for innumerable bridges and culverts within the city limits. San Antonio is an important wool, cotton, horse, mule, and cattle market, and is the centre of numerous railways (see pp. 593, 594). It is also the seat of a United States military post p. 593). Its population of (1900) 53,321, the largest of any city in the state, consists in nearly equal proportions of Americans, Mexicans, and Germans, with a few Coloured people. San Antonio is one of the most interesting cities in the country and will repay a day's halt. It is probably unique in the United States as a town where gambling-dens are still maintained openly, conducted in an honest and orderly manner, and where genuine Mexican cock-fighting is a Sunday afternoon diversion. San Antonio is frequented as a winter-resort by persons of weak lungs (mean temp., winter 52°, summer 82°).

San Antonio de Bexar was settled by the Spaniards about 1690-1700, and, like most of their settlements, combined the character of a *presidio*, or military post, with that of a mission (*San Antonio de Valero*). The most outstanding event in its history is the 'Fall of the Alamo' in 1836. Texas had determined to resist certain obnoxious laws imposed by Mexico, and the latter sent an army under Santa Ana to reduce the rebels. The advance-guard of 4000 men reached San Antonio on Feb. 22nd and found the fortified Church of the Alamo (see below) garrisoned by a body of 145 Americans (afterwards joined by 25 or 30 more), under Travis, Bowie, and Davy Crockett, who refused to surrender. After a siege of 12 days, the church was finally carried by assault (March 6th) and all the survivors of the gallant little band of defenders were put to the sword. 'Remember the Alamo' became a burning watchword in subsequent struggles. See 'San Antonio de Bexar', a handsomely illustrated volume by *Wm. Corner*, including a sketch by *Sydney Lanier* (price $ 1.25), 'Remember the Alamo', a novel by *Mrs. Barr*, and the 'Historical Sketch of the Alamo', by *Leonora Bennett*, sold in the building.

The first object of interest for most visitors to San Antonio is the *CHURCH OF THE MISSION DEL ALAMO, situated in the ALAMO PLAZA, in the quarter to the E. of the San Antonio River. The church, which seems to have derived its name from being built in a grove of *alamo* or cottonwood trees (a kind of poplar; Populus monilifera), is a low and strong structure of adobé, with very thick walls. It was built in 1744, but has lost many of its original features. It is now preserved as a national monument (visitors admitted free). — At the N. end of the Alamo Plaza, in *Houston Street*, is the handsome *Federal Building*. On the W. side of the plaza is the building containing the *San Antonio Club* and the *Grand Opera House*.

Following Houston St. towards the left (W.), we cross the San Antonio and reach *Soledad Street*, which leads to the left to the MAIN

Plaza *(Plaza de Las Yslas)*, pleasantly laid out with gardens. On its S. side rises the imposing *Court House* and on its W. side stands the Cathedral of San Fernando, dating in its present form mainly from 1868-73, but incorporating parts of the earlier building, where Santa Ana had his headquarters in 1836. — To the W. of the Cathedral is the Military Plaza *(Plaza de Armas)*, with the *City Hall*.

The Military Post *(Fort Sam Houston)*, on *Government Hill*, 1 M. to the N. of the city, is one of the largest in the United States and deserves a visit. The tower (88 ft. high) in the centre of the quadrangle commands a splendid *View of the city and its environs.

No stranger in San Antonio should neglect to visit some of the other old Spanish Missions near the city. Those most often visited are the *First* and *Second Missions* (see below), but, if time allows, the *Third* and *Fourth Missions* should be included. They can all be seen by a drive of 5 or 6 hrs.

The Mission of the Conception, or *First Mission*, lies about 2¼ M. to the S. of the city (reached viâ Garden St.), dates from 1731-52, and is wele preserved. The church has two W. towers and a central dome. The sculptures on the W. door should be noticed. — The Mission San José de Aguayo, or *Second Mission*, 4 M. to the S of the city, dates from 1720-3e and is the most beautiful of all. Among the points to be noted are the W. façade of the church and the doorway, window, and capitals of the small chapel or baptistry. To the W. of the church is the *Mission Granary*, with its arched stone roof and flying buttresses (now used as a dwelling). The line of the rampart of the Mission Square is now obscured by adobé huts erected on its ruins. — The Mission San Juan de Capistrano, or *Third Mission*, 6 M. to the S. of San Antonio, dates from 1731. The line of its square is well defined, and its ruined church, chapel, and granary are interesting. About ½ M. distant is a solid old *Aqueduct*, taking water to the Fourth Mission. — The Mission San Francisco de la Espada, or *Fourth Mission*, on the W. bank of the San Antonio River, 9 M. to the S. of the city, also dates from 1731. At the S.E. corner of the Mission Square is a well-preserved *Baluarte* or bastion. The *Church* has been restored and is regularly used for service by the Indians here.

About 3 M. to the S. of San Antonio are the *International Fair Grounds and Buildings*, reached either by the Aransas Pass Railway or by electric tramway. Adjacent is *Riverside Park*, with fine groves of pecan trees *(Carya olivaeformis)*. *San Pedro Park*, 1 M. to the N. of the city, contains fresh springs and a zoological collection. *Brackenridge Park* contains buffalo, deer, elk, and antelopes.

From San Antonio to Rockport, 160 M., *San Antonio & Aransas Pass Railway* in 7 hrs. (fare $ 4.80, to Corpus Christi $ 4.50). The line runs towards the S.E. 61 M. *Kenedy* is the junction of a line to (178 M.) *Houston* (p. 594). — 138 M. *Gregory* is the junction of a line, crossing *Corpus Christi Bay*, to (11 M.) Corpus Christi *(Alta Vista*, from $ 2; *Seaside*, $ 2), a city of 4703 inhab., frequented as a summer-resort. It has a considerable shipping-trade and is connected by the Texas & Mexican Railway with *Laredo* (p. 594). Corpus Christi is the site of the *Epworth League Encampment*, a huge annual gathering of Methodists. The *King* or *Santa Gertrudis Ranch*. 45 M. to the S. of Corpus Christi, covers 1,000,000 acres (1560 sq. M.) and is stocked with 80,000 cattle and 3000 brood-mares. — 160 M. Rockport (*Bayside Ho.*, *The Del Mar*, $ 2; *The Shell*, 2 M. from the town, $ 2½-3), a place of 1153 inhab., situated on *Aransas Bay*, is a favourite resort for bathing and for its fine tarpon (p. 611) and other fishing. Rockport has a good harbour, entered by *Aransas Pass*, which has been improved by the construction of stone jetties. The country round Aransas Pass and Corpus Christi produces large quantities of fruit.

From San Antonio to Austin, 79 M., *International and Great Northern R. R.* in 2½-3 hrs. — 31 M. *New Braunfels* (The Plaza, from $ 2; Lenzen,

$ 1-2; Comal, $ 2), a German town founded by the 'Deutscher Adelsverein' in 1844; 49 M. *San Marcos.* — 79 M. Austin (*Driskill*, R. $ 1-2½; *Avenue*, $ 2-2½; *Hancock*, $ 2-2½), the capital of Texas, a pleasant little city with 22,258 inhab., lies on the *Colorado River*, in full view of the *Colorado Mts.* Its handsome red granite **Capitol*, finely situated on high ground, was built by Chicago capitalists in 1881-88, at a cost of 3½ million dollars, in exchange for a grant of 3 million acres of land. It is the largest capitol in America, after that at Washington, and is said to be the seventh-largest building in the world. Other prominent buildings are the *State University* (2290 students), the *Land Office*, the *Court House*, and various *Asylums.* The *Monument to the Terry Rangers* is by Pompeo Coppini. About 2 M. above the city is the Austin Dam, a huge mass of granite masonry, 1200 ft. long, 60-70 ft. high, and 18-66 ft. thick, constructed across the Colorado River for water-power and water-works. *Lake McDonald*, formed by the dam, is 25 M. long.

From San Antonio to Laredo, 153 M., *International and Great Northern R. R.* in 6⅓ hrs. The intermediate stations are unimportant. — Laredo (*Hamilton*, $ 2-2½; *Ross*, $ 2-2½), a busy commercial city with 13,429 inhab., lies on the left bank of the *Rio Bravo del Norte*, or *Rio Grande*. — *Mexican National Railroad* hence to the *City of Mexico*, see R. 111.

Beyond San Antonio the New Orleans line passes a number of stations of no great importance. 687 M. *Harwood* (450 ft.); 747 M. *Columbus* (210 ft.); 795 M. *Rosenberg* (105 ft.).

832 M. **Houston** (55 ft.; *Rice Ho.*, R. from $ 1½; *Brazos*, R. from $ 1; *Bristol*, $ 2-2½, R. from $ 1; *Macatee*, R. from $ 1; *Tremont*, $ 2), locally pronounced 'Hewston', the second city of Texas in population in 1900 (44,633), lies on the narrow but navigable *Buffalo Bayou*, 50 M. above Galveston. It is a characteristic specimen of a 'hustling', go-ahead, 'Western' city and carries on a large trade in cotton, sugar, timber, and cotton-seed oil. Its manufactories employ about 5000 workmen and in 1900 produced goods to the value of $ 10,640,000. Among the chief buildings are the *Market & City Hall*, the *Cotton Exchange*, the *Court House*, the *Post Office*, and the *Masonic Exchange.* A visit to one of its large *Cotton Presses* is interesting. Houston is the E. centre for the workshops of the Southern Pacific Railway.

Among the numerous railways radiating from Houston may be mentioned the *St. Louis, Brownsville, & Mexico Railway*, running viâ (27 M.) *Algoa* (connecting with a short line to Galveston, see below), *Robstown* (229 M.; junction of a short branch-line to Corpus Christi, p. 593), and (252 M.) *Kingsville* to (370 M.) *Brownsville* (Miller, $ 2).

From Houston to Galveston, *Galveston, Houston, & Henderson R. R.* (50 M.) in 1½ hr., or *Galveston, Houston, & Northern Railway* (57 M.) in 2 hrs. The chief intermediate stations on each line are (6 M. or 7 M.) *Harrisburg* and (39 M. or 47 M.) *Texas City Junction.* From (22 M.) *Strang* (G. H. & H. R. R.) a branch-line runs to (3 M.) *Sylvan Beach*, a small watering-place. As we approach our destination we cross a trestle, more than 2 M. long, leading to *Galveston Island* over the channel between the two wings of *Galveston Bay.*

57 M. **Galveston** (*Tremont*, $ 2½-4; *Royal*, *Seaside*, *Palmetto*, R. from $ 1; *Washington*, $ 2; Brit. Consul, *Mr. H. D. Nugent*; Ger. Consul, *Mr. O. Scheidt*), the fourth city of Texas in population

(37,789 in 1900) but the first in commercial importance, lies at the N.E. extremity of the long and narrow Galveston Island, at the entrance to *Galveston Bay*. It is a most interesting place, well worth a visit. In the hurricane of Sept. 8th, 1900, the city was almost entirely destroyed by a tidal wave, causing the death, direct or indirect, of 6-8000 people. The loss of property was also immense, but Galveston, owing to the courage and rare civic spirit of its inhabitants and to the enterprise of an unusually efficient city government (consisting of a Commission of five members, headed by the Mayor), has rallied bravely from the blow, is rapidly increasing in commercial importance, and, with the opening of the Panama Canal, seems destined for a great future. It claims to be the first cotton and grain shipping port in the United States, and other important exports are wool, hides, flour, fish, and fruit (annual value of exports nearly $200,000,000). The *Gulf Fisheries Co.* maintains packing-houses and a fleet of boats here, supplying fresh fish to Denver and all the West. Galveston has a commodious harbour (protected by two forts), and about 50 regular freight and passenger steamer-lines ply to New York, New Orleans, Key West, Havana, Vera Cruz, Porto Rico, and various South American and European ports. Galveston Bay has a total area of about 450 sq. M. and is guarded at its entrance by a long bar, through which the U. S. Government has constructed a deep water-channel flanked by stone-jetties, 5 M. long. An immense sea-wall has also been built on the outer side of Galveston Island (on the inner side of which the city chiefly lies), to prevent the recurrence of such a catastrophe as that of 1900 (see above). This wall, made of crushed granite sand and cement, is $3^1/_2$ M. long and 17 ft. high, 16 ft. wide at its base and 5 ft. wide at the top, the outer wall being curved toward the sea, and is built on a foundation of piles driven 44 ft. deep. The shoreward filling-in, sloping down to the level of the streets, is 200 ft. in width, affording room for a spacious boulevard and driveway. There is also a promenade along the top of the wall. The general level of the city, formerly little above the level of the bay, has also been raised some 10 ft., and Galveston Island is to be joined with the mainland by a concrete causeway, 2 M. long. To assist the city in these undertakings, the State remitted its taxes for 17 years. The streets are wide and straight, bordered with palms and young trees, and the residence-quarters abound in luxuriant gardens, shaded with oleanders, magnolias, etc. The parks and trees in the streets are in charge of the *Women's Health Protective Association*. Among the principal buildings are the *Masonic Temple*, with an *Athletic Club*, the *Custom House & Post Office*, the *Cotton Exchange*, the *City Hall*, the *Court House*, the *Ball Free School*, the *Rosenberg Free School*, the *Free Public Library*, the *Y. M. C. A.*, the *State Medical College*, with the *Sealy Hospital*, and the *R. C. University* and *Hospital of St. Mary*. There is also a good monument to the Texan heroes of 1836 (see p. 592). *Magnolia Grove Cemetery* may be visited. — On

the seaward side of the wall is a splendidly smooth and hard BEACH, 30 M. long, affording excellent motoring, driving, and walking. Good tarpon (p. 611), Spanish mackerel, and other fishing is obtainable. The mean temperature of winter here is about 62°, of summer 82°.

From Galveston to *Fort Worth* and *Newton*, see pp. 477, 476; to *Texarkana* (for *St. Louis*, etc.), see p. 589; to *Brownsville* (and *Corpus Christi*), see p. 594.

Beyond Houston the New Orleans line continues to run towards the E., traversing the great timber-producing part of Texas. At (822 M.) *Liberty* (40 ft.) we cross the *Trinity River*. 916 M. *Beaumont* (30 ft.; New Crosby, $2-2^1/_2$; Hamilton, R. $1), with 9427 inhab., is one of the centres of an extensive oil-belt. It is connected by an electric line with *Sour Lake* (Sour Lake Hotel, $3), another oil-centre, the population of which is said to have risen from 50 to 10,000 within a few months. Beaumont is the junction of lines N. to *Dallas* (p. 637) and S. to *Sabine Pass* (Brit. vice-consul), with a harbour improved by the U. S. Government. At (944 M.) *Sabine River* we enter *Louisiana* (p. 575). — Near (967 M.) *Sulphur* are the sulphur-mines of the Union Sulphur Co., which produce about 100 tons of sulphur per day. The sulphur, which is extraordinarily pure, lies in a bed several hundred feet below the surface, is melted by super-heated steam, and is brought up through a pipe. — 977 M. *Lake Charles;* 1050 M. *Lafayette* (50 ft.). The line now bends towards the S. The flatness of the great stretches of plain next traversed contrasts strikingly with the billow-like prairies farther to the N. The features of the scenery are tree-lined 'bayous', magnolia-groves, live-oaks and cypresses draped with Spanish moss *(Tillandsia usneoides)*, and plantations of sugar-cane, cotton, and tobacco. — 1115 M. *Morgan City* (Costello, $2^1/_2$; 2332 inhab.) may be made the starting-point of an interesting steamer-trip up the picturesque *Bayou Teche*, penetrating the district to which the Acadians were removed (comp. Longfellow's 'Evangeline'). It is connected with the Gulf of Mexico by a navigable channel 30 M. long. — At (1195 M.) *Algiers* (p. 631) we leave the train and cross the *Mississippi* by ferry.

1196 M. **New Orleans**, see p. 631.

96. From Hagerstown to Bristol. The Shenandoah Valley.

Comp. Map, p. 156.

390 M. NORFOLK & WESTERN RAILWAY in $13^3/_4$ hrs. (fare $11.70; parlor-car $2, sleeper $3). — Passengers from New York and the North (New York to Bristol in 19 hrs.) reach Hagerstown viâ *Philadelphia*, *Lancaster*, and *Harrisburg* (comp. p. 189); those from Baltimore and Washington join the route at *Shenandoah Junction* (comp. pp. 351, 597).

Hagerstown, see p. 189. The line runs towards the S., traversing the battlefield of *Antietam* (p. xl), one of the bloodiest in the Civil War. 6 M. *St. James* (465 ft.). — The village of (14 M.) *Antietam*

(445 ft.) is 1½ M. from *Burnside Bridge*, the scene of the heaviest fighting on Sept. 17th, 1862, and about the same distance from *Sharpsburg*, the field of another severe contest. At Sharpsburg is a National Cemetery, with the graves of 5000 soldiers. Numerous posts and tablets commemorate the chief incidents in the battle of Antietam. One monument commemorates the part played in the battle by President McKinley, then a sergeant in an Ohio regiment. — We now quit Maryland and enter *West Virginia* (p. 189). At (17 M.) *Shepherdstown* we cross the *Potómac*.

23 M. *Shenandoah Junction* (520 ft.), for lines to Baltimore and Washington (see R. 49), Martinsburg (p. 351), and Cumberland (p. 351). We here begin to ascend the lovely ***Shenandoah Valley**, which, in addition to its natural beauties, offers the interest of the campaigns of the Civil War.

The so-called *Valley of Virginia, stretching between the Blue Ridge and the Allegheny Mts. for about 300 M., covers 7500 sq. M of ground and includes the whole or part of the valleys of the Shenandoah, James, Roanoke, and New River. It was the scene of many conflicts during the war, including Stonewall Jackson's skilful operations against Pope, Banks, Fremont, and Shields (1862), and Sheridan's brilliant cavalry feats (1864).

The Shenandoah runs at first to the left, at some distance. Beyond it rise the *Blue Ridge Mts.* — 28 M. *Charlestown* (605 ft.), the scene of John Brown's execution (p. 351), was so called after Col. Charles Washington, a brother of the first President. — We cross the river at (59 M.) *Riverton* (495 ft.), which lies at the confluence of the N. and S. forks of the Shenandoah. We follow the S. fork (to our left). The Shenandoah Valley is here divided into two branches by *Massanutton Mt.*, an offshoot of the Alleghenies, which is now conspicuous to the right. — 62 M. *Front Royal.*

88 M. **Luray** (820 ft.; *Lawrance*, *Mansion Inn*, $ 2), with 1150 inhab., finely situated on the *Hawksbill*, 5 M. from the Blue Ridge and 3-4 M. from Massanutton. It is frequented by thousands of visitors to the Luray Cavern (see below), justly ranked among the most wonderful natural phenomena of America.

To reach the cave from the station (seat in vehicle there and back 50 c.) we ascend the main street of the village to (15-20 min.) the top of the hill, where we see (to the right) the conical hill containing the caves and the cottage at the entrance (adm. $ 1, after 6 p.m $ 1½; electric lights $ 1½-2 extra; description of the cave 25 c.). The *Cavern of Luray, discovered in 1878, is probably 'more completely and profusely decorated with stalactite and stalagmitic ornamentation' than any other in the world, surpassing even the celebrated Adelsberg Cave in this respect. Appropriate names have been given to the more important formations, which are often as beautiful in colour as in shape. Small lakes, rivers, and springs occur. The cavern has a pleasant uniform temperature of 54-58° and is traversed by dry and easy paths, so that a visit to it involves little fatigue. It takes about 1½ hr. to see the parts usually shown to visitors.

Visitors to Luray may also ascend **Stony Man** (4030 ft.), one of the highest of the Blue Ridge summits, which rises 5 M. to the E. and commands a fine view (one day; horses can go all the way to the top) Accommodation may be obtained at (9 M.) *Stony Man Camp* ($ 2), near the top. — Luray is also a good centre from which to visit many of the battlefields of the Virginia Valley campaign.

Beyond Luray the scenery of the valley continues to increase in picturesqueness. 106 M. *Shenandoah*, with iron-works and railway workshops. — 129 M. *Grottoes* or *Shendun* (1120 ft.; Hotel Fulton, $2) is the station for a visit to the *Grottoes of the Shenandoah (Weyer* and *Fountain Caves)*, which lie $^1/_2$ M. from the railway.

The grottoes (adm. $1) are lighted by electricity and are easily explored (2-3 hrs.). The stalactites and stalagmites vie with those of Luray.

At (143 M.) *Basic City* (Belmont, $2; Brandon Hotel, open in summer only, $2-4), a new industrial settlement, we intersect the C. & O. Ry. (p. 565). Near (167 M.) *Vesuvius* (1415 ft.) are the *Crabtree Falls*. 185 M. *Buena Vista* (Colonnade, $2) is another of the busy little towns that have recently sprung up to develop the mineral resources of the district. We cross the *South River*.

198 M. *Natural Bridge Station* (735 ft.), on the *James River*, $2^1/_2$ M. from the *Natural Bridge* (hotel-omnibuses meet the trains; fare 50 c.). The C. & O. Ry. has also a station here.

The **Natural Bridge of Virginia (1500 ft. above the sea) is a huge monolithic limestone arch, 215 ft. high, 100 ft. wide, and 90 ft. in span, crossing the ravine of the *Cedar Creek*. It seems to be a remnant of a great horizontal bed of limestone rock that entirely covered the gorge of the brook, which originally flowed through a subterranean tunnel. The rest of this roof has fallen in and been gradually washed or worn away. The bridge is finely situated in a beautiful amphitheatre, surrounded by mountains, on land originally granted by George III. to Thomas Jefferson, who built a cabin here for the use of visitors. Adjacent is the *Natural Bridge Hotel* (from $3; well spoken of). A kind of *Park* has been formed, embracing the five hills named *Lebanon*, *Mars Hill*, *Mt. Jefferson*, *Lincoln Heights*, and *Cave Mt.*; and drives and bridle-paths have been constructed in all directions.

The pathway to the foot of the bridge (adm. $1) descends along a tumbling brook, overhung by grand old arbor vitæ trees. The *View of the arch from below is very imposing. Among the names upon the smooth side of the archway is that of George Washington (W. side, about 25 ft. up), which was the highest of all until a student named Piper actually climbed from the bottom to the top of the arch in 1818. We pass under the bridge and follow the path up the glen to (1 M.) the small but pretty *Lace Falls*, passing *Saltpetre Cave*, *Hemlock Island*, and the *Lost River*. We then return to the gate-house and follow the road crossing the bridge, so as to enjoy the *Views from the top (from *Pulpit Rock*, *Cedar Cliff*, etc.). A pleasant path leads from the bridge along the edge of *Rock Rimmon*, on the top of the right (W.) bank of the ravine of Cedar Brook (views). — Continuing to follow the road we soon come in sight of the ($^3/_4$ M.) view-tower on *Mt. Jefferson*, which commands a splendid *View of the Blue Ridge (E.), the Peaks of Otter (S.E.; p. 575), Purgatory Mt. (S.), House Mt. (N.), and North Mt. (W.). — The view from *Mt. Lincoln* is said to be even better.

239 M. *Roanoke*, and thence to (390 M.) *Bristol*, see R. 91b.

97. From Salisbury to Asheville and Morristown.

228 M. Southern Railway to (141 M.) *Asheville* in $4^1/_2$-$5^1/_2$ hrs. (fare $4.60; sleeper $2); to (228 M.) *Morristown* in $6^1/_2$-8 hrs. (fare $7.30; sleeper $2). From New York to *Asheville* in 21-25 hrs. (fare $21.45; sleeper $5.)

This railway gives access to the beautiful scenery of Western North Carolina ('Land of the Sky'), which may be described as a plateau with an average altitude of 2000 ft., 250 M. long and 25 M. wide, bounded by

the *Great Smoky Mts.* (p. 577) on the W. and by the *Blue Ridge* (p. 597) on the E. It is crossed by several spurs of the main chain, including the *Black*, the *Balsam*, the *Pisgah*, the *Cowee*, and the *Nantahala* ranges. Many of these are higher than the main chains, the Black Mts. alone containing 19 peaks over 6000 ft. in height. The district is watered by numerous rivers that rise in the Blue Ridge and flow with a steep decline and rapid current across this plateau, cutting through the Great Smokies on their way to the Mississippi. The *French Broad*, the *Pigeon*, the *Tuckaseegee*, and the *Little Tennessee* are the chief of these. In this way the country is cross-sectioned into many smaller valleys, affording endless variety of scenery. The fact that even the highest mountains are densely wooded to their tops adds much to the picturesqueness and softens the outlines of the landscape.

Salisbury, see p. 570. The line runs towards the W. 26 M. *Statesville* (925 ft.) is the junction of lines to *Taylorsville* and *Charlotte* (p. 570). Near (38 M.) *Catawba* we cross the *Catawba*. 48 M. *Newton* (1015 ft.). The main *Blue Ridge* (p. 597) soon comes into sight on the right, while various spurs are seen in the distance to the left. — 58 M. *Hickory* (1165 ft.; Marshall, $2).

From Hickory a narrow-gauge railway runs to (20 M.) *Lenoir* (Hotel Archer, $2-4, well spoken of; Martin's, $2), whence a drive of 4 hrs. brings us to Blowing Rock (*Blowing Rock Hotel*, $ 2-2½; *Green Park Ho.*, from $ 2), 2 M. from the famous precipice and mountain of this name (4000 ft.). The *View from the latter is superb, including the *Grandfather* (5965 ft.) on the W., the *Pilot Mt.* (2435 ft.), 100 M. to the E., *King's Mt.* (1650 ft.) to the S., and *Mitchell's Peak* (p. 600) to the S.W. There are several pretty waterfalls and other points of interest in the vicinity.

To the left, at (79 M.) *Morganton* (1110 ft.), is the large State Lunatic Asylum. We enter the mountain-district proper at (111 M.) *Old Fort* (1435 ft.) and ascend abruptly through a romantic gorge, with its rocky walls overgrown by rhododendrons (in blossom in June). The engineering of the railway here is interesting, with its numerous loops, tunnels, cuttings, and bridges; at one point four sections of the line lie perpendicularly one above the other. At the head of the gorge we thread a long tunnel and reach the plateau of *Western North Carolina* (p. 598). — 125 M. *Black Mt. Station.*

About 2 M. from this station (good road) lies *Montreat* (Hotel Montreat, $ 3), beautifully situated at the headwaters of the Swannanoa. It forms a convenient starting-point for the ascent of *Mt. Mitchell* (p. 600) and other peaks.

139 M. *Biltmore* (see p. 600).

141 M. **Asheville.** — *Battery Park Hotel, on a hill above the town, from $ 4, R. from $ 1½; Kenilworth Inn, 2 M. from Asheville, near Biltmore, see p. 600, from $ 3, open all the year; The Manor, with several cottages, in Albemarle Park, $ 3-4 according to season; Victoria Inn, $ 2½-3½, on a hill, with fine view; Swannanoa, from $ 2½; Margo Terrace, from $ 2; Glen Rock, at the station, $ 2. — *Electric Tramway* to the station (1½ M. from the centre of the town) and to Biltmore and other suburbs (5 c.).

Asheville (1985 ft.), finely situated at the junction of the *Swannanoa* and the *French Broad*, is the chief town of the district and is widely known as a health-resort for patients suffering from pulmonary and other ailments. Pop. (1900) 14,694. About 70,000 persons visit Asheville annually, Southerners frequenting it for its comparative coolness in summer (mean temp. 72°) and Northerners for its

mildness in winter (39°) and spring (53°; chief seasons, July and Aug., Feb. and March). Its climate is dry and bright, and there are usually few days in the year in which out-door exercise is not enjoyable. It is said to be preëminently suitable for early stages of phthisis, while sufferers from asthma, hay fever, nervous prostration, and the after-effects of fever all derive benefit from a sojourn in Asheville. The environs are full of scenic attractions and offer abundant opportunities for pleasant walks, rides, and drives. *Overlook* and *Riverside Parks*, reached by electric cars (fare 15 c.; splendid views), have casinos, boating, and tennis courts.

Walks. *Beaumont*, 1/2 M. to the E.; grounds open to visitors. — *Fernihurst*, 1 1/2 M. to the S., overlooking the junction of the Swannanoa and the French Broad (open daily, Sun. excepted). — *Richmond Hill*, 2 1/2 M. to the N.W. (always open). — *Gouche's Peak* (3 M.) and *Elk Mt.* (5 M.), to the N. of the town, are fine points of view. — About 2 M. to the S.E. of Asheville, near Biltmore station (p. 599), is *Biltmore, the home of Mr. George W. Vanderbilt. The house, built in the French baronial style by Richard M. Hunt, at a cost of $ 4,000,000, stands upon a terrace 700 ft. long by 300 ft. wide and commands magnificent views. It contains much fine tapestry and other works of art. Many miles of beautiful drives have been constructed in the grounds, which have an extent of over 130,000 acres, and they show a wonderfully varied display of trees (views). Visitors are admitted to the grounds on Tues., Thurs., & Sat., 12-6 p.m., by passes obtained at the Biltmore Office in Biltmore village (small fee; large excursion-parties not admitted). Special passes sometimes issued for other days. — Most of the Biltmore Estate (excepting 6000 acres round the château) has been leased by the *Kenilworth & Pisgah Forest Shooting & Fishing Association*, which offers its members and their friends admirable opportunities of sport. At the railway-station is a tasteful model village, also designed by R. M. Hunt, with cottages grouped around a central green. A *School of Domestic Science*, for coloured girls, has been opened here.

Drives. *Swannanoa Drive*, extending for several miles along the river, the banks of which are thickly wooded and covered with rhododendrons, kalmia, and other wild flowers. — *Sulphur Springs*, 4 1/2 M. to the S. — *Hickory Nut Gap, a beautiful pass where the *Broad River* penetrates the Blue Ridge, lies 14 M. to the S.E. About 9 M. beyond the entrance to the Gap is the curious *Chimney Rock*. On the opposite side rises *Bald Mt.* (5550 ft.), celebrated in *Mrs. Frances Hodgson Burnett's* 'Esmeralda'. There are two plain hotels not far from Chimney Rock. Other points of interest are the *Pools* and the *Hickory Nut Falls* (1300 ft.). — *Arden Park* (Hotel, $ 2), 10 M. to the S.

Longer Excursions and Mountain Ascents. *Mt. Mitchell or *Black Dome* (6710 ft.), the highest peak in the United States to the E. of the Rocky Mts., rises in the Black Mts., 18 M. to the E. of Asheville. Its base may be reached by carriage along the Swannanoa or by railway to *Black Mt. Station* (p. 599) and thence (10 M.) by carriage. The ascent (arduous but not dangerous) takes 5 hrs. The *View is very extensive. Provisions and horses may be obtained at the Hotel Montreat (p. 599), and the night is usually spent in a shallow cave near the top. The name is derived from *Prof. Elisha Mitchell*, who lost his life here in 1857, while determining the height of the mountain, and is buried at the summit. — *Mt. Pisgah (5715 ft.), one of the loftiest peaks near Asheville, lies 18 M. to the S.W. and commands a splendid view of the French Broad Valley. Accommodation for the night can be obtained in a farmhouse at the base, and the ascent may be made on horseback in 2 hrs. — Craggy Mt. (6090 ft.), an outlier of the Blue Ridge, 14 M. to the E., may be ascended on horseback in 2 hrs. (best in June, when hundreds of acres of rhododendrons, kalmias, azaleas, and heather may be seen in bloom). — *Cæsar's Head (3225 ft.), an outlier of the Blue Ridge, 45 M. to the S.W. of Asheville, may be reached either by carriage

the whole way or by train to *Brevard* (see below) and carriage thence. On the S. side of the mountain is a precipice 1500 ft. high, overlooking the low country of South Carolina and Georgia for 100 M. At the summit stands a fair hotel ($ 2). Various points of interest are passed on the way. — Other distant points visited from Asheville are *Hot Springs* (see below), *Highlands* (p. 571), *Roan Mt.* (p. 576), *Tryon* (see below), and *Blowing Rock* (p. 599).

From Asheville to Spartanburg, 70 M., railway in 3½-3¾ hrs. — This line runs towards the S.E. 22 M. *Hendersonville* (2130 ft.; Gates, from $ 3; The Wheeler, from $ 2) is the junction of a line to *Lake Toxaway* (see below). Farther on the train reaches the picturesque *Saluda Gap, where it descends rapidly through a narrow gorge. Fine views (best to the left). Rhododendrons numerous. — 43 M. *Tryon* (Mimosa, from $ 2½), a pleasant little resort. — 70 M. *Spartanburg*, see p. 571.

From Hendersonville to Lake Toxaway, 42 M., *Southern Railroad* in 2½ hrs. This railway penetrates to the heart of the so-called '*Sapphire Country*' (hotels open in summer only), a beautiful lake-district, elevated about 3000 ft. above the sea. — The chief intermediate station is (22 M.) *Brevard* (Franklin Inn, from $ 2½), whence numerous pleasant excursions may be made. It is one of the nearest stations to (16 M.) *Caesar's Head* (p. 600). — 42 M. **Lake Toxaway** (**Toxaway Inn*, $ 2½-5). The most accessible of the neighbouring mountains is *Mt. Toxaway* or the *Great Hogback* (4780 ft.; The Lodge, $ 2), which commands a fine view of the district, including 100 other peaks and extending to the Smoky Mts. of Tennessee (p. 577). Two other charming sheets of water, each about 7 M. from Lake Toxaway, are *Lake Fairfield* (Fairfield Inn, $ 3-4) and *Lake Sapphire* ($ 2½), a favourite fishing-resort.

From Asheville to Murphy, 124 M., railway in 6¾ hrs. — The line runs towards the S.W. 28 M. *Waynesville* (2640 ft.; White Sulphur Springs Ho., from $ 3) lies amid the *Balsam Mts.*, five of which in the immediate vicinity are over 6000 ft. high. — 36 M. *Balsam* (Rail. Restaurant). 49 M. *Dillsboro* lies 32 M. to the N. of *Highlands* (p. 571), which is sometimes approached hence. — 124 M. *Murphy* (Cottage Park, from $ 2, summer only).

Beyond Asheville the Morristown Train runs to the N. through the beautiful valley of the *French Broad River*. Picturesque scenery (views first to the right, then to the left, and then to the right again). 153 M. *Alexander*.

179 M. **Hot Springs** (1325 ft.; **Mountain Park Hotel*, $ 3-4), situated in a beautiful little valley, 1 M. in diameter, surrounded by mountains 3-4000 ft. high, has long been frequented for its hot springs and delightful climate (winter milder than at Asheville). The springs (temp. 84-104°) are efficacious in rheumatism, gout, sciatica, skin and blood affections, and nervous prostration. Pleasant walks may be taken among the hills, but the drives are limited to those up and down the river. *Round Top* (1750 ft.), to the N., across the river, is easily ascended in ½ hr. and commands a good view.

At (184 M.) *Paint Rock* (1265 ft.) the French Broad forces its way through a gap between the *Great Smoky Mts.* (left) and the *Bald Mts.* (right). We enter *Tennessee* (p. 583).

At (228 M.) **Morristown** (*Virginia Ho.*, $ 2) we join the line from *Washington* to *Chattanooga* (see R. 91 b).

98. From Richmond to Charleston.

a. Viâ Weldon.

396 M. Railway (*Atlantic Coast Line*) in 9¾-14¾ hrs. (fare $ 9.85; sleeper $ 3). This line forms part of the 'Atlantic Coast Line Route' from New York to Florida (see R. 103a; from New York to *Charleston* in 19¼-26 hrs.; fare $ 19.00, sleeper $ 4.50).

From *Richmond* to (23 M.) *Petersburg*, see p. 564. Some remains of the fortifications of the Civil War are still visible (see p. 564). Near (76 M.) *Pleasant Hill* we enter *North Carolina*. At (84 M.) *Weldon* (80 ft.) we intersect the *Seaboard Air Line* from Norfolk (see p. 562). The train now traverses a flat region, clothed with endless pine-forests. 121 M. *Rocky Mount*, the junction of lines to (116 M.) *Norfolk* (p. 561) and to (68 M.) *Plymouth*, on *Albemarle Sound*. At (137 M.) *Wilson* the line forks, the new 'Short Cut' running in a straight direction, while the line to (24 M.) *Goldsboro* (comp. p. 570) and (108 M.) *Wilmington* diverges to the left.

Wilmington (*New Colonial Inn*, from $ 2½; *Orton*, $ 2½; *Ocean View*, $ 2½, at Carolina Beach; *Sea Shore Hotel*, at Wrightsville Beach, $ 2½; Brit. & Ger. vice-consuls), the largest city of North Carolina (20,976 inhab.), lies on the *Cape Fear River*, 20 M. from the Atlantic Ocean. It has a large foreign commerce and regular steamship-communication with New York, Philadelphia, and Baltimore. It is a prominent market for naval stores. The *Atlantic Coast Line* (see above) has its headquarters here. — From Wilmington a railway runs to the N. to (87 M.) *New Bern* (p. 570).

163 M. *Selma*, the junction of a line to *Raleigh* (see p. 570); 211 M. *Fayetteville*, the junction of lines to *Sanford* and *Greensboro* (p. 570), to *Bennettsville*, and to *Wilmington* (see above).

On the Bennettsville line, 25 M. from Fayetteville, lies *Red Springs* (Townsend Hotel), a frequented resort with two mineral springs. In summer a coach runs hence to *Southern Pines* (p. 581).

243 M. *Pembroke*, the junction of a line to *Charlotte* (p. 570). At (281 M.) *Pee Dee* we are rejoined by the Wilmington loop-line. — 294 M. *Florence* (Central Hotel, $ 2-3), with 4647 inhab., is a cotton-market. We here turn sharply to the left (S.). — 342 M. *Lane's* is the junction of a line to (37 M.) *Georgetown* (Tourist, $ 2½-3), a quaint old seaport (400 inhab.). 390 M. *Ashley Junction* (comp. pp. 608, 612).

396 M. *Charleston*, see p. 603.

b. Viâ Charlotte and Columbia.

520 M. Southern Railway in 17-19 hrs. (fares as above).

Richmond, see p. 555. The train crosses the *James*, passes (1 M.) *Manchester* (p. 555), and runs to the S.W. through a tobacco-growing district. At (53 M.) *Burkeville* (515 ft.) we intersect the Norfolk & Western Railway (R. 91 b). 73 M. *Keysville* (625 ft.). At (90 M.) *Randolph* we cross the *Staunton*, a tributary of the *Roanoke*. From (109 M.) *South Boston* we follow the *Dan River* to (141 M.) **Danville** (p. 570).

A	Museum	A2	
B	Circular Church	B2	
C	City Hall	B2	
D	City Hospital	A2	
E	College of Charleston	B2	
F	Court House	B2	
G	Custom House	B2	
H	Gibbes Memor.l Art Gall.y	B2	
I	Huguenot Church	B2	
J	Jail	B2	
K	Market Hall	B2	
L	Medical College	B2	
M	Old Marine Hospital	B2	
N	Orphan House	B1	
O	Porter Milit.y Academy	A1	
P	Post Office	B2	
Q	Roper Hospital	B2	
R	St. John's Cathedral	B2	
S	St Michael's Church	B2	
T	St Philip's Church	B2	
U	St Xavier's Infirm.y	A2	
V	White Point Garden	B3	
W	Women's Ex.	B2	

From Danville to (282 M.) **Charlotte**, see p. 570. We here diverge to the left from the route to New Orleans (R. 91a). Beyond (299 M.) *Fort Mill* we cross the *Catawba River*. 326 M. *Chester*.

391 M. **Columbia** (300 ft.; **Colonial*, from $ 3½, R. from $ 2; *Jerome*, from $ 2½; *Wright*, $ 2½-4; *Columbia Hotel*, from $ 2½), the capital of South Carolina, lies on the high banks of the *Congaree*, in the district of the *Pine Barrens*. Pop. (1900) 21,108. Its streets are wide and shady, and many of the public buildings are imposing. The most important is the **State House*, in the grounds of which is a fine monument to the 'Palmetto Regiment', which served with distinction in the Mexican War (1846-47). Other large edifices are the *State Penitentiary*, the *Lunatic Asylum*, the *Court House*, and the *City Hall*. The *University of South Carolina* is attended by 285 students. The grounds of the *Executive Mansion* and *Arsenal Hill* command fine views of the valley. Pleasant drives may be taken in the *Fair Grounds* and *Sydney Park*. The city possesses large car, machine, and iron works.

Columbia became the state-capital in 1796. In 1832 the 'Nullification Ordinance' was passed by a convention sitting here; and on Dec. 20th, 1860, another convention announced the dissolution of the union between S. Carolina and the other states. The city was occupied by Gen. Sherman in 1865 and suffered severely from fire.

From Columbia to (94 M.) *Spartanburg*, see p. 571; to *Augusta*, see p. 607.

Beyond Columbia our line passes through a level, pine-clad district. 414 M. *Kingville* is the junction of branch-lines to (37 M.) *Camden* (p. 613) and to (24 M.) *Sumter*. — At (457 M.) *Branchville* (Rail. Restaurant) we join the line described in R. 100.

520 M. *Charleston*, see below.

99. Charleston.

Hotels. Charleston Hotel (Pl. a; B, 2), from $ 3; St. John (Pl. d; B, 2), $ 2½; Argyle (Pl. b; B, 2), R. from $ 1½, these three all in Meeting St.; Villa Margherita (Pl. c; B, 2), South Battery; Shamrock Terrace, East Battery, these two boarding-houses, preferable to the hotels (previous application necessary). — *Railway Restaurant; Women's Exchange* (Pl. W; B, 2), S. King St. for 'Lady Baltimore' cake; comp. Owen Wister's novel of that name).

Electric Tramways, including a Belt Line, traverse the chief streets (5 c.) and run to various suburban points. — *Omnibuses & Automobiles* meet the principal trains (fare 25 c.).

Railway Station: Union (Pl. B, 1), a mile from centre of town.

Steamers ply to *New York* (50 hrs.; fare $ 20), *Boston*, *Savannah*, *Georgetown*, *Beaufort*, and *Jacksonville*. A steam-ferry plies daily to *Mt. Pleasant*, in connection with electric cars to *Sullivan's Island* and *Isle of Palms* (comp. p. 606).

Post Office (Pl. P; B, 2), cor. of Meeting and Broad Sts. — *Academy of Music*, King St.

Consuls. British Vice-Consul, *Mr. Alex. Harkness;* German, *Mr. E. Jahnz*.

Charleston, the largest city of South Carolina and one of the chief seaports of the Southern States, occupies the end of the narrow peninsula formed by the confluence of the *Ashley* and *Cooper Rivers*, about 6 M. from their embouchure in the Atlantic Ocean. It is a pleasant old-fashioned town, with its main streets well paved and numerous picturesque private residences embowered in semi-tropical flowers and trees. Pop. (1900) 55,807, more than half of whom are coloured. The land-locked harbour, since recent deepening and improvements, admits vessels of 30 ft. draught.

The small body of colonists under Col. Sayle, sent out by the lords proprietors to take possession of the Carolinas in 1669, after calling at Port Royal, settled on the W. bank of the Ashley River, but soon (ca. 1680) transferred their town, named in honour of Charles II., to its present site. In 1685-86 numerous Huguenot emigrants were added to the population, and 1200 exiles from Acadia settled here in 1755. Charleston took a prominent share in the Revolution, repelled an attack on *Sullivan's Island* (Pl. F, 3) in 1776 (Col. Moultrie), and was captured by Sir Henry Clinton in 1780 after an obstinate defence. The Civil War began at Charleston with the bombardment of *Fort Sumter* (p. 605; April 12-13th, 1861), and the city was more than once attacked by the Unionists in the ensuing years, being finally evacuated in Feb., 1865. In 1886 Charleston was devastated by a severe earthquake, which rendered seven-eighths of its houses uninhabitable, destroyed property to the value of $8,000,000, and killed scores of persons. A few traces of its action are still visible in the form of ruined buildings and iron stays and clamps. — The visitors from the N. will be interested in the *Buzzards*, which act the part of scavengers. Comp. 'Charleston: the Place and the People', by *Mrs. St. Julien Ravenel* (1906).

Before the war Charleston was the chief cotton-shipping port of America, and it still handles a good deal of cotton and rice. Its present prosperity is, however, chiefly due to the discovery of extensive beds of excellent phosphates near the Ashley River; and the annual value of the exports of this article (including fertilizers) amounts to about $10,000,000. A visit to the phosphate-mines is interesting. Charleston also carries on a trade in timber, fruit, and vegetables, and manufactures cotton, flour, carriages, machines, and other articles (value in 1900, $9,562,500).

Leaving the *Union Railway Station* (Pl. B, 1) we may first proceed to the W. to Meeting Street (Pl. A, B, 1, 2), the chief wholesale business street. Here we turn to the left and soon reach Marion or Citadel Square, adorned with a statue of *John C. Calhoun* (1782-1850), the famous S. Carolina statesman. On the N. side of the square is the large **South Carolina Military Academy**, usually known as the *Citadel* (Pl. B, 1), the cadets of which took a prominent share in the Civil War (see p. 605). — Farther on we pass the *Argyle* and *Charleston Hotels* (p. 603); the *Market* (Pl. K, B 2; interesting sight 6-9 a.m.); the *Circular Church* (Pl. B; left), rebuilt some years ago in a handsome style; the *Gibbes Memorial Art Gallery* (Pl. H), opposite the last; the *St. John Hotel* (p. 603); and the *Commercial Club* (right). At the intersection of the street with Broad Street (Pl. B, 2) stands a group of public buildings: the *Court House* (Pl. F) and *Post Office* (Pl. P; a handsome granite edifice) to the right, and the *City Hall* (Pl. C; with some interesting portraits) and **St. Michael's Church** (Pl. S; originally built in 1752-61; comp. p. lxxxvii) to the left.

St. Michael's was struck six times by the Federal cannon during the siege, was damaged by a cyclone in 1885, and nearly destroyed by the earthquake in 1886. Its fine tower (view) contains a good set of chimes. In the churchyard, close to the iron gate in Broad St., is the tomb of a brother of A. H. Clough, with an epitaph by the poet, who spent part of his boyhood in Charleston, where his father was a cotton-merchant.

In front of the City Hall is a *Statue of William Pitt*, erected in 1770; the right arm was broken off by a British cannon-shot in 1780.

Farther on, Meeting St. passes numerous private houses, embowered in roses, jessamines, and myrtles. It ends at ***White Point Garden** (Pl. V; B, 3), shaded with beautiful live-oaks and commanding a fine view across the Ashley River. The *Jasper Monument* commemorates a gallant act in the defence of Fort Moultrie (see below; June 28th, 1776). Adjacent are a bronze *Bust of Wm. Gilmore Simms* (d. 1870) and a round tower made of blocks of phosphate (see p. 604). To the E. extends the **Battery** (Pl. B, 2, 3), a broad esplanade, 500 yds. long, affording a good view of the harbour and its forts.

On the island opposite the battery is *Castle Pinckney* (Pl. C, 2), and farther out is *Fort Ripley* (Pl. D, 3), while *Forts Moultrie* (Pl. F, 3) and *Johnson* (Pl. D, 4) stand opposite each other on *Sullivan's Island* (left) and *James Island* (right). Modern fortifications have been erected on Sullivan's Island, and in 1897 a company of U. S. troops was stationed there for the first time since the Civil War. *Fort Sumter* (Pl. E, 4) occupies a small island in the middle of the entrance to the harbour. The first shot in the Civil War was fired by the Citadel cadets (p. 604), from a battery thrown up on *Morris Island* (beyond Pl. E, 4), against a vessel trying to take reinforcements to the Union troops in Fort Sumter (Jan. 9th, 1861). On April 12th Fort Moultrie and the other batteries opened fire on Fort Sumter, which had been occupied by Major Anderson with a small body of Union troops, and its flag was hauled down on the following day. In 1863 the Federal fleet invested the harbour and began a bombardment of the forts and the city, which lasted, with scarcely an intermission, till the final evacuation of Charleston in 1865. Morris Island had to be abandoned, but Forts Sumter and Moultrie defended themselves successfully against all attacks. Steamer to Fort Sumter, etc., see p. 603.

We now return along EAST BAY (Pl. B, 1, 2), passing the old *Post Office*, to the **Custom House** (Pl. G), built of white marble (view of harbour from back). A visit may also be paid to one of the *Cotton Compresses* (no smoking) in this locality.

Charleston prides itself, with some reason, on its charitable institutions. Perhaps the most prominent of these is the **Orphan House** (Pl. N; B, 1), founded in 1792 and said to be the oldest American institution of the kind. The *Enston Home* (beyond Pl. A, 1), in King St., consists of a group of 40 cottages, with a church.

Other important buildings are the *College of Charleston* (Pl. E; B, 2), founded in 1788; *St. Philip's Church* (Pl. T; B, 2), Church St., with Calhoun's grave in the churchyard (on the other side of the street); *St. Finbar's Cathedral* (R. C.; Pl. R, B 2), rebuilt since 1890 and now dedicated to John the Baptist; the old *Huguenot Church* (Pl. I; liturgy translated from the French); the *Medical College* (Pl. L); the old *Powder Magazine*, now used as a Chapter Room by the Colonial Dames'; the *Porter Military Academy* (Pl. O; A, 1); the

Museum (Pl. A; A, 2); and the *Roper Hospital* (Pl. Q; B, 2). The *Avery Normal School* has 400 coloured students.

To the N. of the city, 3 M. from the City Hall (tramway 10 c.; carr. there and back $ 5), lies *Magnolia Cemetery, which should be visited for its fine live-oaks (draped with 'Spanish moss'), azaleas, magnolias, camelias, almond-trees, etc. (best in May or June). The boughs of one of the live-oaks have a spread of 100 ft., and the trunk of another is 17-18 ft. in girth. — To the N.W. of the city lies *Hampton Park* (Pl. A, 1).

No one in the season (March-May) should omit to visit the (12 M.) **Gardens of Magnolia (reached by railway or steamer), on the Ashley, the chief glory of which is the gorgeous display of the azalea bushes, which are sometimes 15-20 ft. high and present huge masses of vivid and unbroken colouring. The live-oaks, magnolias, and japonicas are also very fine.

The **Church of St. James's Goosecreek*, an interesting relic of 1711, with the British Royal Arms still suspended above the chancel, lies in the heart of a forest 1 M. from (15 M.) *Otranto Station*. Otranto was the residence of Dr. Alex. Garden (d. 1791), after whom Linnæus named the gardenia. Near the church is a farm known as *The Oaks*, from a magnificent **Avenue of Oaks* (200 years old) which leads to it.

Electric Cars run from Charleston to (7 M.) *Chicora Park* (return-fare 20 c.) and viâ *Mt. Pleasant* (Pl. E, 1) and *Sullivan's Island* (Pl. F, 3; Atlantic Beach Hotel, $ 2½-3) to (10 M.) *Isle of Palms* (Seashore, $ 2½), a resort on the Atlantic coast (return-fare 30 c.). Osceola (p. 617) died as a captive at Fort Moultrie (Pl. F, 3) and is buried on Sullivan's Island.

On the *Cooper River*, to the N. of Charleston, is a *U. S. Naval Station*, with dockyard (electric car viâ Meeting St.; fare 10 c.).

100. From Charleston to Augusta.

138 M. Southern Railway in 5-8 hrs. (fare $ 4.50; parlor-car 75 c.).

Charleston, see p. 603. The line runs slightly to the N. of W. 15 M. *Woodstock*. — 22 M. **Summerville** (**Pine Forest Inn*, from $ 3½, open in winter only; *Dorchester Inn*, from $ 2), a favourite winter-resort among the pines and much frequented by the citizens of Charleston. There are many beautiful drives in the neighbourhood, and fair fishing and shooting are within easy reach. Its golf-links are good.

Near Summerville is *Pinehurst Tea Plantation* (Dr. Shepard's), the first in the United States. Its annual produce amounts to about 3000 lbs.

42 M. *Pregnall's* is the junction of a line to *Sumter* (p. 603).

63 M. *Branchville* (Rail. Restaurant) is the junction of the line to *Columbia* (see p. 603). Our line continues to run towards the W. and at (91 M.) *Blackville* intersects the line from Columbia to Savannah (see p. 608).

121 M. **Aiken** (490 ft.; **Park in the Pines*, from $ 5; *Magnolia Inn*, *Palmetto*, from $ 2½; *Aiken Hotel*, commercial, open all the year round, from $ 2), with 4000 inhab., a popular and fashionable winter-resort. It lies in the 'sand hill' or 'pine barren' district of S. Carolina, and is surrounded by vast forests of fragrant pines, growing in a soil of white sand. The gardens of the town, thanks to careful cultivation and a liberal use of fertilizers, are full of jes-

samine, orange-trees, and other S. plants. The air is dry and balmy. The mean temperature of winter is 50° Fahr., of spring 57°, of autumn 64°. The *Palmetto Golf Links* (18 holes) at Aiken, among the best in the S., are the scene of various important competitions. Fox-hunting, racing, polo, tennis, squash, and cricket are also among the amusements.

Extensive deposits of kaoline occur near the town, and this contains a large percentage of aluminium, for the extraction of which large works have been recently erected.

An electric tramway runs from Aiken to (1 hr.) *Augusta*, passing *Hampton Terrace* (see below).

138 M. **Augusta** (180 ft.; **Bon Air Hotel*, at Summerville, see below, $4-5; *Albion*, *Genesta*, *Planters*, *Turkish Baths Hotel*, R. from $1; *Three Oaks Inn*; **Hampton Terrace*, N. Augusta, in S. Carolina, 1/4 hr. by trolley from Augusta, from $5), the third city of Georgia (56,230 inhab.), pleasantly situated on the right bank of the Savannah, at the head of navigation, and connected by a bridge with *Hamburg* (S. C.) on the left bank. It carries on a large trade in cotton (400,000 bales yearly), and its cotton-mills, run by a system of *Water Power Canals*, produce more unbleached cotton goods than any other city in America (value of manufactures in 1900, $10,000,000). The main canal, bringing water from the Savannah, is 7 M. long, 150 ft. wide, and 14 ft. deep; it is owned by the city, and its revenues pay nearly the whole interest on the municipal debt. *Broad Street*, 120 ft. wide and paved with asphalt, is one of the handsomest business-thoroughfares in America; **Greene Street*, with a fine double avenue of trees, is the most beautiful residence-street. In Broad St. is a handsome *Confederate War Monument*. Among the chief buildings are the *City Hall*, the *U. S. Building*, and the *Exchange*. The *Sibley Cotton Mill* is architecturally noteworthy. Close by it rises the tall *Chimney of the Confederate Powder Mills*, left standing as a memorial of the Civil War. *Eli Whitney* (p. 236), who invented and perfected the cotton-gin in Georgia, in 1792, is commemorated by a bronze tablet in the Court House.

On the hills 3 M. to the W. of Augusta (electric car) lies *Summerville* (3245 inhab.), with a U. S. Arsenal and the Bon Air Hotel (see above). — *Schultz's Hill*, at Hamburg (see above), and the *Fair Grounds* are favourite resorts.

From Augusta to Atlanta, 171 M., *Georgia R. R.* in 5 3/4-6 1/2 hrs. (fare $3.85; sleeper $1.50). The chief intermediate stations are (47 M.) *Camak*, the junction of a line to Macon (p. 611); 103 M. *Madison*, the junction of lines to Macon and Athens (p. 581); and (119 M.) *Social Circle*, connecting with the Gainesville, Jefferson, and Southern R. R. — 171 M. *Atlanta*, see p. 571.

From Augusta to *Savannah*, see R. 102. — Other lines connect it with (83 M.) *Tennille* (Augusta Southern R. R.; a fruit-growing centre), *Port Royal* (p. 608), *Seneca*, *Spartanburg* (p. 571), etc.

101. From Richmond to Savannah.

a. Viâ Charleston.

511 M. Railway *(Atlantic Coast Line)* in 15 hrs. ($ 12.75; sleeper $ 3.50).

From Richmond to (396 M.) *Charleston*, see R. 98a. The line turns to the left (S.) at (402 M.) *Ashley Junction* (p. 602) and traverses a marshy district, with forests of moss-draped cypress and oak. At (456 M.) *Yemassee* we intersect the railway from Augusta (p. 607) to *Beaufort* and *Port Royal*.

Beaufort *(Sea Island Ho.*, from $ 2½; *Inlet Inn;* Brit. vice-consul, also for Port Royal, *Mr. J. E. Kessler)*, on *St. Helena Island*, is a fashionable Southern resort, with 6000 inhab. and a fine shell-road and promenade. — Port Royal, with one of the finest harbours on the coast, was the first landing-place of the Charleston settlers (see p. 604).

486 M. *Hardeeville* (see below). We cross the wide and slow *Savannah* before reaching (497 M.) *Monteith*, and beyond it we cross the line from Augusta (p. 610).

511 M. *Savannah*, see below.

b. Viâ Danville and Columbia.

544 M. Southern Railway in 16-17 hrs. (fares as above).

From Richmond to (391 M.) *Columbia*, see R. 98b. Beyond Columbia the train runs to the S. through a flat, wooded region. 423 M. *Perry*. At (443 M.) *Blackville* (p. 606) we intersect the line from Charleston to Augusta (see R. 100), and at (469 M.) *Allendale* we cross the line from Augusta to Port Royal (see above). 482 M. *Valentine;* 499 M. *Pineland*. At (521 M.) *Hardeeville* we join the Atlantic Coast Line. Hence to (544 M.) *Savannah*, see above.

Savannah. — *De Soto Hotel (Pl. a; B, C, 3), Madison Sq., a large and handsome house, $ 3-5, R. from $ 1½; Martinique (Pl. d; B, 2), cor. Bull St. and Oglethorpe Ave.; Pulaski (Pl. b; B, 1), Screven (Pl. c; B, 2), Johnson Sq., $ 2½-3½, R. $ 1.

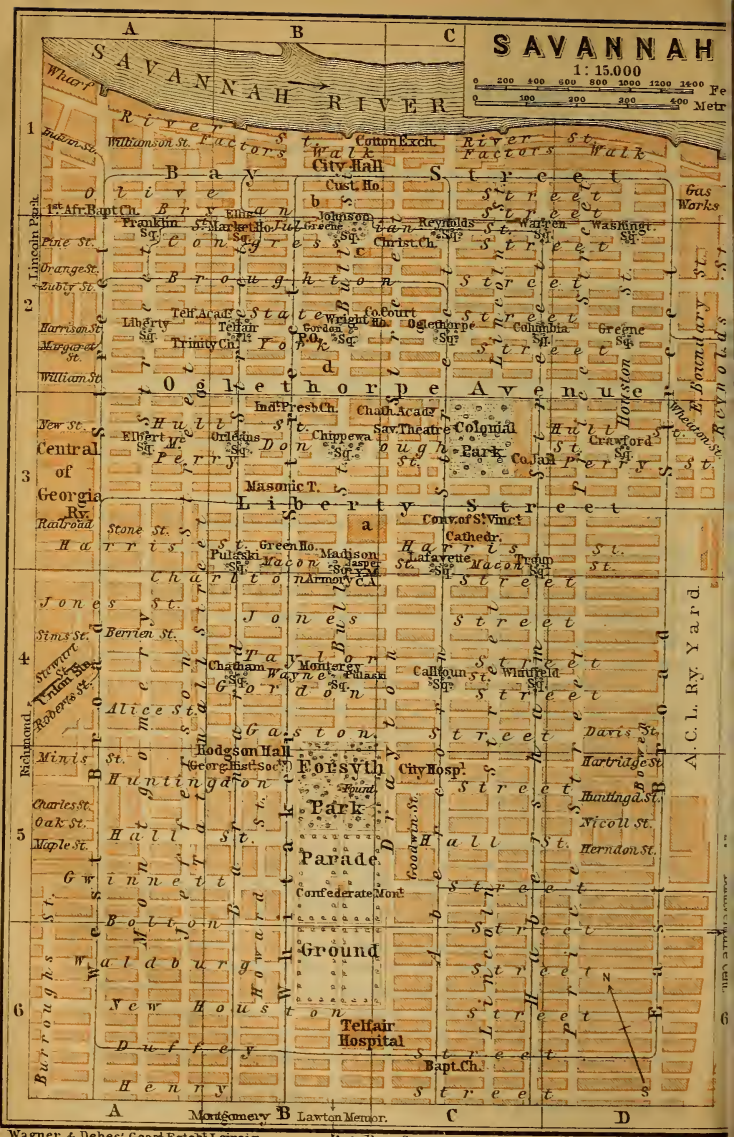
Railway Stations. *Union Station* (Pl. A, 4), for various lines, W. Broad St., between Stewart & Roberts Sts.; *Central of Georgia Railway Station* (Pl. A, 3), cor. W. Broad and Liberty Sts.; *Tybee Depot* (beyond Pl. D, 2), for the railway to Tybee Beach (p. 610).

Tramways traverse the chief streets (5 c.). — Steamers ply from the wharves on the Savannah (beyond Pl. D, 1) to *New York* (45-55 hrs.; $ 20), *Boston*, *Philadelphia*, *Baltimore*, *Norfolk*, *Charleston*, *Florida*, etc.

Post Office (Pl. B, 2), Wright Sq. — Savannah Theatre (Pl. B, C, 3), Chippewa Sq. (dating in part from 1818, but practically rebuilt after a fire in 1906).

Consuls. British (for N. & S. Carolina, Georgia, and Tennessee), *Mr. J. A. Donnelly*, 10 Abercorn St.; German, *Mr. Ernst Eichhorn*.

Savannah ('Forest City'), the second city and chief commercial centre of Georgia, lies on the S. bank of the river of the same name, on a bluff 40 ft. above the level of the river and 18 M. from its mouth. It is well built and regularly laid out, and the beautiful semi-tropical vegetation of its numerous parks and squares makes a very pleasing impression. *Bay Street* is the chief thoroughfare for wholesale business,


SAVANNAH
1 : 15.000
SAVANNAH RIVER
Wharf
River St.
Factors Walk
Cotton Exch.
City Hall
Cust. Ho.
Bay Street
Olive Street
Bryan Street
Congress Street
Broughton Street
State Street
York Street
Oglethorpe Avenue
Hull St.
Perry St.
Liberty Street
Charlton Street
Jones Street
Taylor Street
Gordon Street
Gaston Street
Huntingdon Street
Hall St.
Gwinnett Street
Bolton Street
Waldburg Street
New Houston Street
Duffey Street
Henry Street
Bull St.
Whitaker St.
Drayton St.
Abercorn St.
Lincoln St.
Hubert St.
Price St.
Bowen St.
Houston St.
Reynolds St.
Gas Works
E. Boundary St.
Wheaton St.
A. C. L. Ry. Yard
Central of Georgia Ry.
Railroad
Lincoln Park
Richmond
Montgomery St.
Jefferson St.
Barnard St.
Howard St.
Burroughs St.
Montgomery
Lawton Memor.
Telfair Hospital
Forsyth Park
Parade Ground
Confederate Mont.
City Hosp.
Hodgson Hall
Georg. Hist. Soc.
Masonic T.
Conv. of St. Vinct.
Cathedr.
Colonial Park
Co. Jail
Sav. Theatre
Chath. Acad.
Ind. Presb. Ch.
Chippewa Sq.
Orleans Sq.
Elbert Sq.
Pulaski Sq.
Green Ho.
Madison Sq.
Jasper Sq.
Lafayette Sq.
Troup Sq.
Calhoun Sq.
Whitfield Sq.
Chatham Sq.
Monterey Sq.
Pulaski Sq.
Wayne Sq.
Franklin Sq.
Ellis Sq.
Market Ho.
Johnson Sq.
Greene Sq.
Reynolds Sq.
Warren Sq.
Washingt. Sq.
Christ. Ch.
Telf. Acad.
Liberty Sq.
Telfair Pl.
Trinity Ch.
Gordon Sq.
Wright Ho.
Co. Court Ho.
Oglethorpe Sq.
Columbia Sq.
Greene Sq.
Crawford Sq.
Bapt. Ch.
Davis St.
Hartridge St.
Huntingd. St.
Nicoll St.
Herndon St.
Stone St.
Berrien St.
Alice St.
Minis St.
Charles St.
Oak St.
Maple St.
Jones St.
Sims St.
Stewart St.
Union St.
Roberts St.
Indian St.
Williamson St.
1st Afr. Bapt. Ch.
Pine St.
Orange St.
Zubly St.
Harrison St.
Margaret St.
William St.
New St.
Montgomery
Lawton Memor.
Wagner & Debes' Geog. Estab. Leipzig.
Auto Race Course

while *Congress Street* and *Broughton Street* contain the best shops. *Bull Street* is the most fashionable promenade. Pop. (1900) 54,244.

Savannah was settled in 1733 by *Gen. Oglethorpe*, the founder of the youngest of the 13 original states, and owes much of its present beauty to the foresight of the plan he laid out. His object was to provide an asylum for the poor of England and the Protestants of all nations. John and Charles Wesley visited the settlement in 1736, and George Whitefield reached it in 1737. In the early troubles between the British and Spanish colonists Oglethorpe and his settlers played a prominent part, penetrating to the walls of St. Augustine (p. 615). In 1778 Savannah was captured by the British, who repulsed a Franco-American attempt to retake it the following year. The port of Savannah was closed to commerce by the Federal fleet from 1861 to 1865, and Sherman occupied the city in Dec., 1864, at the end of his triumphant 'March through Georgia' (comp. p. 571). Since the war its progress has been rapid. Savannah contained 5195 inhab. in 1810; 15,312 in 1850; and 43,189 in 1890. — The first steamship to cross the Atlantic Ocean started from Savannah in 1819.

Savannah's export-trade is extensive, the chief articles being cotton, lumber, rice, and naval stores (total value in 1906, $ 64,839,551). Its manufactures (value $ 8,000,000 in 1906) include railway-cars, fertilizers, flour, and iron. Savannah has taken away much of the shipping-trade from Charleston. A visit should be paid to one of the *Rice Mills* (River St.) and one of the *Cotton Compresses* (at the wharves).

The visitor may begin with a glance at the warehouses and wharves at the foot, and at the busy traffic of *Bay St.* (Pl. A-D, 1) on the top of the bluffs overhanging the river. Among the buildings in this part of the city are the *City Exchange* or *City Hall* (Pl. B, 1; *View from tower) and the *Custom House* (Pl. B, 1). We then follow *Bull Street (see above) towards the S., crossing Johnson Square (Pl. B, 1, 2), with a *Monument to Gen. Greene*, erected in 1829, and the recently restored *Christ Church* (Pl. B, C, 2; good interior). In the building at the N.E. corner of Bull St. and Broughton St. the Ordinance of Secession was passed on Jan. 21st, 1861. In Wright Square (Pl. B, 2) are the handsome **County Court House**, built in 1889-91, and the **Federal Building**, including the *Post Office* and the *U. S. Court House*. A boulder-monument in this square commemorates *Tom-O-Chi-Chi*, the Indian chief from whom Gen. Oglethorpe (see above) acquired the site of Savannah.

A little to the W. of this point, in Telfair Place, is the *Telfair Academy (Pl. A, B, 2; adm. 10-5, Sun. 1-5; 25 c.). It contains a collection of casts, a selection of paintings, and various objects of art and historical interest. Among the paintings are good works by *Kaulbach*, *Julian Story*, *Dücker*, *Szymanowski*, *J. von Brandt*, and *C. L. Brandt*. The galleries are adorned with mural paintings by *Schraudolph* and *C. L. Brandt*.

At opposite corners of *Oglethorpe Avenue* are the *Independent Presbyterian Church* (Pl. B, 3) and the *Chatham Academy* (Pl. B, 3). — In Oglethorpe Ave., a little to the E., is the *Colonial Park* (Pl. C, 3), on the site of an interesting old burying-ground.

We then cross *Chippewa Square* (Pl. B, 3) and reach *Liberty Street*, in which, a little to the E., is the *Convent of St. Vincent de Paul* (Pl. C, 3). The fine *Roman Catholic Cathedral* was rebuilt after a fire in 1898. In *Madison Square* (Pl. B, 3, 4) is the *Jasper Monument* (comp. p. 605), erected in 1879 in honour of Sergeant

Jasper, who was killed at Savannah in 1779. The *Green House*, at the N.W. corner of the square, was the headquarters of Gen. Sherman (p. 609). At the S.W. corner is the *Guards Armoury*. To the E. is the new *Y. M. C. A.* (Pl. B, C, 3, 4). *Monterey Square* (Pl. B, 4) contains the *Pulaski Monument*, in memory of Count Pulaski, who fell at the siege of Savannah in 1779 (see p. 609).

We now reach the beautiful ***Forsyth Park** (Pl. B, 4, 5), with its pines, roses, coleas, palmettoes, oleanders, jasmines, cacti, magnolias, etc. In the centre is a fountain. The *Parade Ground* (Pl. B, 5, 6), forming an extension of the park towards the S., contains a fine *Confederate War Monument* (Pl. B, 5). At the S. end of the Parade Ground is the *Telfair Hospital* (Pl. B, C, 6). The *Memorial of General Lawton* (1899), in Anderson St. (beyond Pl. B, 6), deserves notice. At the corner of Whitaker and Gaston Sts., adjoining Forsyth Park on the W., is *Hodgson Hall* (Pl. B, 4, 5), with the *Public Library* and the collections of the *Georgia Historical Society*. The *First African Baptist Church* (Pl. A, 1, 2), Franklin Square, has 5000 communicants.

Environs. ***Bonaventure Cemetery**, 4 M. to the E., reached by the *Savannah Electric Railway* (cor. of Bolton St. and E. Broad St., Pl. D 6; fare 5 c.) or by the *Thunderbolt Shell Road*, is famous for its avenues of live-oaks, draped with Spanish moss. *Thunderbolt*, on the *Wilmington River*, 1 M. farther on, is a favourite resort. — Another fine shell-road leads to the S. to (9 M.) *White Bluff*. — The *Hermitage*, 5 M. to the N.W., on the Savannah River, is an interesting Colonial mansion. — Another branch of the *Savannah Electric Railway* runs from the corner of Whitaker and 40th Sts. to (6 M.; fare 5 c.) *Isle of Hope*, on the *Skidaway River*, and to (9 M.; fare 10 c.) *Montgomery*, on the *Vernon River*, two pretty suburban resorts. Near the latter, to the E., is *Beaulieu*. At (8 M.) *Bethesda*, on this line, is a large orphanage, established by George Whitefield in 1740. — At the mouth of the Savannah River lies (18 M.) **Tybee Beach** (*Hotel Tybee*, $ 3-4), one of the most popular sea-bathing resorts of the S. (railway in 3/4 hr.; comp. p. 608; return-ticket 40 c.). It has a fine beach. Adjacent, on *Cockspur Island*, is *Fort Pulaski*, which has been greatly strengthened since its capture by the Unionists in 1862. — A steamer plies twice weekly from Savannah to *Fernandina* (p. 615), calling at *Brunswick* (p. 579) and at several points on the ***Sea Islands**, on which large quantities of 'Sea Island' cotton and rice are grown. They are covered with palmettoes and live oaks. The S. end of *Cumberland Island*, between Brunswick and Fernandina, became the property of Gen. Nathaniel Greene after the Revolution, and Washington's friend, 'Light Horse Harry Lee', died and was buried here in 1818. The mansion-house is named *Dungeness*. — The *Savannah Automobile Course*, 26 3/4 M. in length, is one of the best in the country.

102. From Savannah to Atlanta.

295 M. Central of Georgia Railway in 11 hrs. (fare $ 7.81; sleeper $ 2).

Savannah, see p. 608. The railway runs a little to the N. of W. At (17 M.) *Meldrim* we connect with the Seaboard Air Line. 30 M. *Guyton*; 35 M. *Tusculum*; 57 M. *Dover*, the junction of a line to (10 M.) *Statesboro*; 66 M. *Rocky Ford*, the junction of a line to (20 M.) *Sylvania*.

At (79 M.) *Millen* the railway forks, the right branch running to the N. to (53 M.) **Augusta** (see p. 607). Our line bends to the left and runs nearly due W. 87 M. *Rogers*; 96 M. *Midville*; 107 M.

& Debes' Geog. Estab. Leipzig

Wadley; 135 M. *Tennille* (p. 607). Beyond (146 M.) *Oconee* we cross the river of that name. From (171 M.) *Gordon* a branch-line diverges to the right for *Machen (Covington, Athens).*

191 M. **Macon** (*New Lanier Ho.*, $ 2½-4; *Brown Ho.*, from $ 2½; *Park*, $ 2), a cotton-mart and railway-centre, with 23,272 inhab., lies on the *Ocmulgee River*. The *Wesleyan Female College* here (475 students) dates from 1836 and claims to be the oldest female college in the world. *Mercer College* is a Baptist institution.

The Central of Georgia branch running to the S. from Macon to (71 M.) *Americus* passes (60 M.) *Anderson* or *Andersonville*, the site of the great Stockade Prison in which so many of the Union troops were confined during the Civil War. The prison-grounds have been converted into a park, and a memorial monument has been erected.

At Macon our line crosses the Southern Railway route from Chattanooga and Atlanta to Brunswick (see p. 579) and turns towards the N.W. — 217 M. *Forsyth*, with the flourishing Monroe Female College; 233 M. *Barnesville.* — 251 M. *Griffin* (Nelms Ho., $ 2), with 6857 inhab. and large cotton-mills (towels, etc.). Near Griffin is the *Georgia Experimental Farm.* A line diverges here to the left for *Carrollton.* — 267 M. *Lovejoy;* 281 M. *Forest;* 288 M. *East Point;* 290 M. *Fort McPherson* (p. 572; seen to the left).

295 M. **Atlanta,** see p. 571.

103. From New York to Florida.

a. Viâ Atlantic Coast Line.

Railway to (1012 M.) *Jacksonville* in 25²/₃-36¼ hrs. (fare $ 26.30; sleeper $ 6.50); to (1049 M.) *St. Augustine* in 26¾-38¾ hrs. (fare $ 30.40; sleeper $ 7); to (1251 M.) *Tampa* in 38¼-47 hrs. (fare $ 35.45; sleeper $ 8.50). The 'New York & Florida Special', a vestibuled through-train similar to that described at p. 229, runs in winter only.

Florida, occupying the peninsula in the extreme S.E. corner of the United States, was the first portion of North America colonized by Europeans (comp. pp. 478, 616) and was named by its Spanish discoverers (1512) because first seen on Easter Sunday (*'Pascua Florida'*). Its mild and equable winter climate has made it a favourite resort of invalids and others who wish to escape the rigours of the North, while the beauties of its luxuriant semi-tropical vegetation and its excellent opportunities for shooting and fishing are additional attractions. The game on land includes deer, bears, pumas *(Felis concolor)*, wild-cats, wild turkeys, and numerous other birds, while the fishing for tarpon *(Megalops thrissoides)*, the largest and gamiest of game-fish (sometimes 200lbs. in weight), has its headquarters in this state (comp. pp. 621, 627). The orange is believed to have been introduced by the Spaniards, and about 5 million boxes (ca. 175 to a box) were annually produced before the severe frosts of 1894, 1895, and 1899 killed most of the trees. The yield sank to a few hundred thousand boxes; but the groves have generally been replanted. In the S. part of the State, especially on the E. coast, large quantities of pineapples are now profitably raised. Strawberries and vegetables are also extensively produced for early shipment to northern markets. Tobacco, cotton (including the valuable 'sea-island cotton', p. 610), rice, maize, oats, and sugar-cane are also grown, and extensive and valuable beds of phosphates are worked. About three-fourths of the State, exclusive of swamps, prairies, and hardwood timber, is covered by pine-forests; and the lumber industry

is extensive. Sponge and turtle fishing are other sources of wealth. The S. portion of the State is occupied by the *Everglades*, which may be described as a huge shallow lake, 1-6 ft. deep and 8000 sq. M. in extent, filled with low-lying islands surrounded by clear water that abounds in fish. A remnant of the Seminole Indians still linger here, but the district is without the pale of the ordinary tourist.

The peninsula of Florida affords the most distinct field, in a physiographic sense, of any part of N. America. Including the N. portion of the State, it has a length of about 600 M., an average width of near 100 M., and a total area greater than that of New York, and nearly as great as that of New England. In all this great realm the maximum height above the level of the sea does not exceed about 400 ft. The whole of the soil is composed of materials recently brought together on the sea floor. About one fourth of the soil area is limy, due to the coral rock which underlies it. The remainder is nearly pure sand of a rather infertile nature. All the soil owes its value in the main to the admirable climate which the region enjoys ('Nature and Man in America', by *N. S. Shaler*).

The *Season* to visit Florida is from Dec. to April, when all the hotels are open and everything is seen to advantage. The communication with the North is excellent (comp. pp. 611, 613, 614), and the hotels at the chief resorts are unsurpassed in the United States. Invalids should not visit Florida without medical advice, and all should remember that the climate varies considerably in different parts of the State. *Clothing* of medium thickness will be found most suitable, though it is advisable to be prepared for occasional great heat as well as for some really cold weather. Dust-coats will be found useful. *Walking Excursions* are not recommended, and most of the roads are too sandy for pleasurable *Driving*. *Motoring* on the hard sand-beaches has lately become a favourite pastime (comp. p. 618). British anglers should consult *F. G. Aflalo's* 'Sunshine and Sport in Florida and the West Indies' (1907).

From New York to (228 M.) *Washington* (by the Pennsylvania R. R.), see RR. 16a, 25, & 27a; from Washington to (342 M.) *Richmond*, see R. 88; from Richmond to (732 M.) *Ashley Junction*, see R. 98a (the 'Florida Special' does not run into Charleston); from Ashley Junction to (841 M.) *Savannah*, see R. 101a.

From Savannah we run towards the S.W. The district traversed is rather featureless, but the traveller from the N. will be interested in the 'Spanish Bayonets' *(Yucca filamentosa)* and other vegetable evidence of a Southern clime. Near (858 M.) *Way's* we cross the *Ogeechee*, and beyond (901 M.) *Johnston* the *Altamaha*. At (898 M.) *Jesup* we intersect the line from Atlanta to Brunswick (see p. 579).

938 M. *Waycross* is a junction of some importance, lines running hence to Dupont (see below), Jacksonville (p. 614), Brunswick (p. 579), and *Albany*. Numerous pear-orchards.

From Waycross to Dupont, 34 M., railway in 3/4-1 1/2 hr. From *Dupont* the Atlantic Coast Line System extends to the W. and N.W. to (70 M.) *Thomasville* (see below) and (280 M.) *Montgomery* (p. 573), while to the S. it runs to *Live Oak* (p. 630), *High Springs*, *Lakeland*, and (296 M.) *Tampa* (p. 627). — Thomasville (250 ft.; *Mitchell Ho.*, $ 2; *Masury Hotel*, R. $ 1, both open all the year), is a favourite winter-resort on a plateau covered with pine-forests. Pop. (1900) 5322. Its attractions include numerous walks and drives (Glen Arvern, Paradise Park, etc.), shooting, an opera house, and comfortable hotels. It is supplied with water by an artesian well 1900 ft. in depth. Round the town are numerous orchards of the 'Le Conte' pear.

From Waycross our line runs to the S.E. Beyond (971 M.) *Folkston* we cross the *St. Mary's River* and enter *Florida* ('Everglade

State'). At (993 M.) *Callahan* we cross the Seaboard Air Line from *Fernandina* (p. 615) to *Tampa* and *Cedar Key* (R. 107c).

1012 M. **Jacksonville,** see p. 614. Hence to (1049 M.) *St. Augustine* and (1378 M.) *Miami*, see p. 615; to (1251 M.) *Tampa* and (1260 M.) *Port Tampa*, see R. 107a.

b. Viâ Southern Railway.

Railway to (1023 M.) *Jacksonville* in 26²/₃-34¼ hrs., to (1058 M.) *St. Augustine* in 27¾-36 hrs., to (1261 M.) *Tampa* in 41-44 hrs. (fares as at p. 611). The 'Florida Limited' leaves New York at 12.10 p.m.

From New York to (228 M.) *Washington*, see R. 27; thence to (609 M.) *Charlotte*, see R. 91a; thence to (718 M.) *Columbia*, see pp. 602, 603; thence to (871 M.) *Savannah*, see p. 608.

Beyond Savannah this route is the same as that just described, except that the Southern Railway trains do not run viâ Waycross but proceed direct by the 'Jesup Short Line' from (927 M.) *Jesup* to (980 M.) *Folkston* and so to (1023 M.) *Jacksonville* (p. 614).

c. Viâ Seaboard Air Line.

Railway to (981 M.) *Jacksonville* in 25½-33¾ hrs., to (1018 M.) *St. Augustine* in 26½-36 hrs., to (1193 M.) *Tampa* in 42½-43½ hrs. (fares as at p. 611). The 'Year Round Limited' leaves New York at 1.25 p.m.

From New York to (228 M.) *Washington*, see R. 27; thence to (344 M.) *Richmond*, see R. 88; thence to (598 M.) *Hamlet*, see R. 91c.

At Hamlet we diverge from the New Orleans line and soon enter *South Carolina*. — 614 M. *Cheraw;* 642 M. *McBee;* 649 M. *Bethune*. — 669 M. **Camden** (220 ft.; *Hobkirk Inn*, **Court Inn*, from $ 3, these two open in winter only; **Kirkwood*, at Camden Heights, from $ 3), a popular and bracing winter-resort among the pines.

Farther on we cross the *Catawba*. — 702 M. **Columbia,** see p. 603. We here pass from Eastern to Central time (p. xiv). The line now runs due S. 718 M. *Gaston;* 729 M. *Woodford*. At (753 M.) *Denmark* we cross a line from Aiken to Charleston. 763 M. *Olar;* 779 M. *Fairfax;* 786 M. *Gifford*. Beyond (803 M.) *Garnett* we cross the *Savannah* and enter *Georgia* (p. 571).

844 M. **Savannah,** see p. 608. — We continue to run towards the S. At (855 M.) *Burroughs* we cross the *Ogeechee* and the Atlantic Coast Line (R. 103a). Beyond (886 M.) *Darien Junction* (for *Darien*, with a Brit. vice-consul), we cross the *Altamaha*. At (903 M.) *Everett* we intersect the line from Atlanta to Brunswick (see p. 579). Beyond (945 M.) *Kingsland* we cross the *St. Mary's River* and enter *Florida* (p. 612). — 958 M. *Yulee* is the junction of the line from Fernandina (p. 615) to Baldwin, Tampa, and Cedar Key (R. 107c).

981 M. **Jacksonville,** see p. 614. Hence to (1018 M.) *St. Augustine*, see p. 615; to (1193 M.) *Tampa*, see R. 107c.

d. By Steamer.

There are various combinations for a sea-voyage on the way from New York to Florida.

Steamers of the *Clyde Steamship Co.* run thrice weekly (or oftener) from New York (Pier 36, N. River) to *Charleston* (fare $ 20) and *Jacksonville* (2½-3 days; fare $ 25).

A steamer of the *Mallory Line* plies every Frid. at midday from New York (Pier 15, E. River) to *Brunswick* (p. 579; 60 hrs.; fare $ 20). From Brunswick a steamer of the Cumberland ('inside') Route runs in connection with the New York boats to *Fernandina* (p. 615; 3½ days; through-fare $ 21.15). Jacksonville is 1½ hr. from Fernandina by railway (see p. 615) and 3½-4 hrs. from Brunswick viâ *Everett* (p. 579; through-fare $ 22.25).

Steamers of the *Ocean Steamship Co.* leave New York (Pier 35, N. River) 3-4 times weekly for *Savannah* (50 hrs.; fare $ 20, to Jacksonville $ 25), and Boston (Lewis Wharf) twice weekly for the same port (60 hrs.; $ 22, to Jacksonville $ 27). From Savannah to *Jacksonville* by railway, see RR. 103a, 103b, 103c.

Steamers of the *Merchants and Miners Transportation Co.* run thrice weekly from *Baltimore* (foot of West Falls Ave.) and twice weekly from *Philadelphia* to *Savannah* (50 hrs.; fare $ 15, from New York $ 18.80, from Boston $ 22). From Savannah to *Jacksonville* by railway as above (through-fare from Baltimore $ 20.65, from New York $ 24.45).

A steamer of the *Old Dominion Line* leaves New York (Pier 26, N. River) every week-day for *Norfolk* (p. 561; 19-20 hrs.; $ 6½), whence we may proceed to the S. by the Seaboard Air Line viâ *Norlina* (p. 580), by the Atlantic Coast Line viâ *Rocky Mount* (p. 602), or by the Southern Railway (comp. p. 575).

Jacksonville. — Aragon Hotel, Windsor, from $ 3; Grand View, Duval, from $ 2½; Roseland, $ 2. — *Boarding Houses*, $ 6-12 per week. *Furnished Rooms*, $ 2½-6 per week.

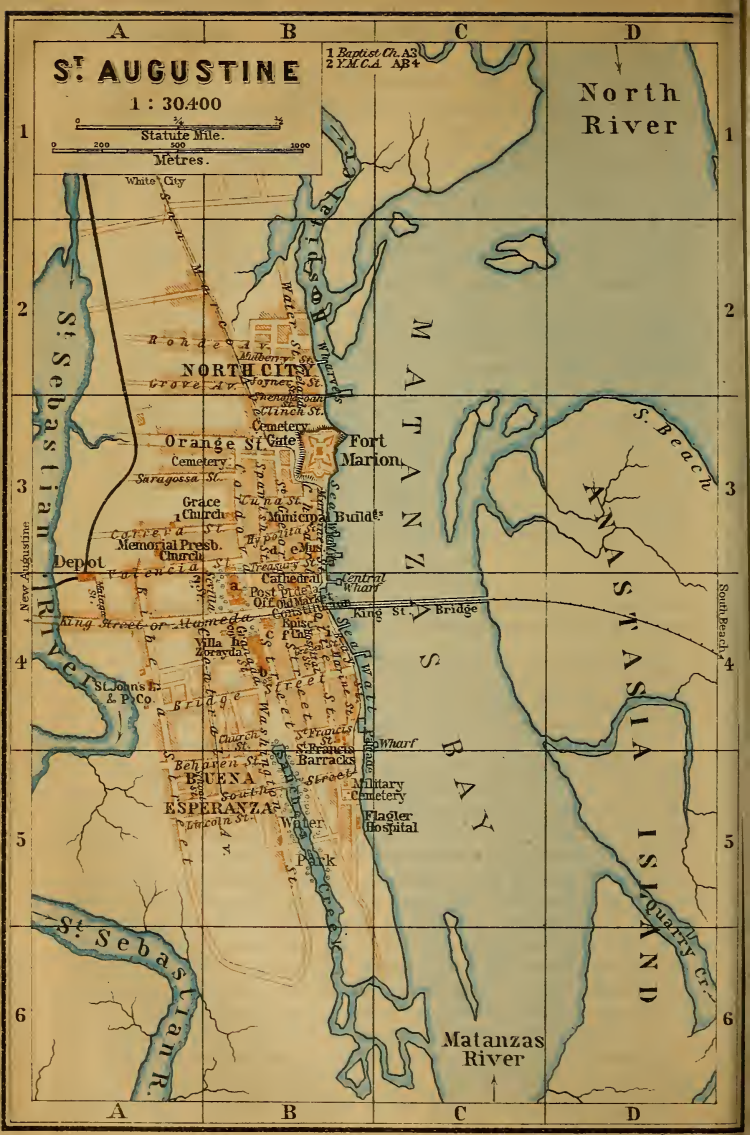
Electric Tramways run through the chief streets and to the suburbs. — Cab from the stations or wharves to the hotel, 25 c. each pers.; each trunk 25 c.

Steamers ply up the *St. John's River* (p. 623) and to *Mayport*, *Charleston*, *New York*, *Boston*, etc. — Small Boats, at the foot of Market St., 25 c. per hr

British Vice-Consul, *Mr. Edward Sudlow.* — Post Office, Hogan St., corner of Forsyth St.

Jacksonville, the commercial metropolis of Florida (51,865 inhab. in 1905), situated on the left bank of the *St. John's River*, 22 M. from its mouth, was founded in 1822 and named after Gen. Andrew Jackson. It is much frequented by visitors from the N. on account of its dry and equable winter-climate (mean winter temp. 55° Fahr.) but offers comparatively little of interest to the passing tourist, who will probably regard it merely as a stage on the way to St. Augustine and the more picturesque parts of Florida. It carries on a large trade in fruit, timber, and grain, and has some manufactures. The chief business-streets are *Bay Street* and *Forsyth Street*, parallel with the river, and *Laura Street* and *Main Street*, at right angles to it. The residence-streets are generally shaded with bitter-orange and other trees. The chief streets are paved with vitrified brick.

Pleasant drives may be enjoyed on the shell-roads to the N. and in the Riverside suburb (S.W.). Good views of the city and river are enjoyed from the *Viaduct*, which leads from Bay St. to River-



Wagner & Debes' Geogr. Estab. Leipzig

side Ave., and from the ferry plying from the foot of Newnan St. to S. Jacksonville. A *Confederate Monument* was unveiled in 1898 in St. James Park. A visit may be paid to the *Florida Ostrich Farm.*

From Jacksonville to Fernandina, 36 M., railway in 1½ hr. (fare $ 1.10). — Fernandina *(Albemarle, Florida*, from $ 2; Brit. vice-consul, *Mr. E. V. Nicholl)*, a seaport with (1905) 4959 inhab., situated on the W. side of *Amelia Island*, at the mouth of the *Amelia River*, was settled by the Spaniards in 1632. It has a fine harbour and carries on a trade in phosphates, naval stores, and timber, while steamers ply to Brunswick (see p. 579), European ports, etc. Its population is much increased in winter by visitors from the N. A good shell-road leads to (2 M.) *Amelia Beach*, a fine expanse for bathing and driving. Excursions are often made to *Cumberland Island* (p. 610). — From Fernandina to *Baldwin*, *Tampa*, and *Cedar Key*, see R. 107 c.

From Jacksonville to Mayport, 26 M., *Florida East Coast Railway* (reached by ferry from foot of Newnan St.) in 1 hr. (fare 65 c.). — 18 M. Pablo Beach (*Hotel Pablo*, *Ocean View*, from $ 2), one of the most popular summer and sea-bathing resorts in Florida, has a splendid beach and the usual seaside attractions. — 20 M. Atlantic Beach (*Continental*, from $ 2½), another similar resort. — 26 M. *Mayport*, at the mouth of the St. John's River. This point may also be reached by steamer from Jacksonville or by driving along the beach from Pablo Beach. From Mayport we may visit *Fort George Island* by small boat.

From Jacksonville to *St. Augustine*, *Miami*, and *Key West*, see below; to *Enterprise* and *Palm Beach*, see pp. 620, 621; up the *St. John's River*, see p. 623; to *Pensacola* and *New Orleans*, see R. 108; to *Tampa*, see R. 107.

104. From Jacksonville to St. Augustine, Miami, and Key West.

Comp. Map, p. 611.

524 M. Florida East Coast Railway to (37 M.) *St. Augustine* in 1-1¼ hr. (fare $ 1.25), to (366 M.) *Miami* in 11-13 hrs. (fare $ 11), and to (478 M.) *Knight's Key Dock* in 16-18 hrs. (fare $ 15.20). Steamer of the *Peninsular Occidental Co.* from Knight's Key Dock to (46 M.) *Key West* in 4 hrs. (fare $ 4.60; through-fare $ 18.90).

Jacksonville, see p. 614. The train crosses the *St. John's River* by a steel bridge, 1320 ft. long, and traverses the suburb of *South Jacksonville*. Farther on we see a few orange groves, but most of the journey for 150 M. passes through pine woods. Between (13 M.) *Greenland* and (16 M.) *Bayard* we cross the *Arlington*.

37 M. **St. Augustine.** — *Hotel Omnibuses* and *Carriages* at the station, ¾ M. from the town (25 c.; trunk 25 c.). — *Hotel Ponce de Leon (Pl. a; B, 4), from $ 5; *Alcazar (Pl. b; B, 4), from $ 4; Alcazar Annex (formerly the *Cordova;* Pl. c, B 4), E. P., these owned by the Florida East Hotel Co.; St. George (Pl. f; B, 4), Magnolia (Pl. d; B, 3), from $ 3; Marion (Pl. i; B, 4), Florida Ho. (Pl. e; B, 3), Buckingham (Pl. h; B, 4), Granada (Pl. g; B, 4), Valencia, Barcelona, from $ 2. All the hotels are open in winter only. — *Boarding Houses*, $ 8-15 per week. — *Casino*, attached to the Alcazar Hotel, with Turkish, electric, and other baths.

Carriages $ 1½-3 per hr., $ 4-5 per day; *Saddle Horses* $ 1 and $ 3. — Boat, with attendant, from 25 c. per hr., $ 2-5 per day (Central Wharf).

Post Office (Pl. B, 4), Plaza de la Constitucion (open 8-6).

St. Augustine (accent on first syllable), one of the most picturesque and interesting little cities in America, lies on the Atlantic coast near the S. end of a narrow peninsula formed by the *Matanzas*

and *St. Sebastian Rivers*, and opposite *Anastasia Island*. The surrounding country is flat, sandy, and overgrown with palmetto scrub. The older streets are all very narrow; the old Spanish houses are built of 'coquina' (a kind of shell limestone), and some of them have overhanging balconies. The gardens and squares are full of palmettoes, Spanish daggers, orange and citron trees, date palms, magnolias, and bananas. The permanent population of St. Augustine is (1905) 5121, but this is increased to at least 10,000 during winter. The climate is temperate and equable, the mean temperature for the year being about 70°, for winter 58°.

In 1512 the Spaniard Ponce de León landed near the Indian town of *Seloy* (on or near the site of St. Augustine), in search of the 'Fountain of Youth' (comp. p. 626), but, not finding it, re-embarked. Half-a-century later (1564) French Huguenots, under René de Laudonnière, landed near the same spot, but soon migrated to the St. John's River. The settlement of a Protestant colony within his trans-Oceanic dominions aroused the indignation of Philip II. of Spain, who forthwith sent out an expedition under Don Pedro Menendez de Avila to exterminate the invaders. Menendez landed at Seloy on Sept. 8th, 1565, found the Indians friendly, and erected the fort of *San Agustin*. St. Augustine is thus one of the oldest permanent settlements of Europeans within the territories of the United States (comp. p. 478). The Spaniards lost no time in carrying out the object of their coming by destroying the French *Fort Caroline* and massacring its inhabitants. During the next century St. Augustine led a very chequered existence. It was plundered by Sir Francis Drake in 1586 and by Capt. John Davis in 1665, and it was attacked on other occasions by the Indians, French, Carolinians, and Georgians (p. 609). In 1763 St. Augustine, with the rest of Florida, was yielded to Great Britain, but it was restored to Spain twenty years later. Under the British it contained about 290 householders and 900 negroes. In 1821 Florida was ceded to the United States, and from this time may be dated St. Augustine's fame as a winter-resort, though it was not till after the termination of the troubles with the Seminole Indians (1842) that any large number of Northern visitors found their way hither.

There are now few persons of Spanish descent in St. Augustine, all having left the city on the British or American occupation; but most of the present residents are descended from the Greeks and Minorcans who moved from New Smyrna to St. Augustine in 1770 (see p. 619). Many of the older and more picturesque features of the place are disappearing, though a laudable effort has been made to erect new buildings in a style in harmony with the local atmosphere and traditions.

In the centre of the city is the *Plaza de la Constitucion (Pl. B, 4), extending on the E. to the sea-wall and the Matanzas, beyond which is seen the island of Anastasia (p. 618).

The *Monument* in the centre of the square was erected in honour of the Spanish Liberal constitution of 1812, from which it takes its name. On the E. side is the *Old Market*, erroneously known as the Slave Market. On the N. side is a *Confederate War Monument*. The *Roman Catholic Cathedral*, also on the N. side, was rebuilt on an enlarged scale after the fire of 1887. To the W. is the *Post Office*, to the S. the *Episcopal Church*.

Along the S. side of the Plaza runs the Alameda *(King St.)*, which brings us at once to a group of handsome modern buildings in a Spanish or Moorish style (Pl. B, 4). To the right is the huge *Ponce de Leon Hotel* (properly pron. 'Ponthe de Leōn', but usually called 'Pons dee Leeon'), to the left the *Alcazar Annex*, the *Alcazar*, and the *Villa Zorayda*, all adjoined by beautiful semi-tropical gardens.

The ***Ponce de Leon** (Pl. a), designed by Carrère & Hastings in the style of the Spanish Renaissance, is 380 ft. wide (façade) and 520 ft. long and encloses a large open court. The towers are 165 ft. high (*View). It is built of concrete, with red-tiled roofs and brick and terracotta details. The scheme of colour is very effective. The interior of the *Central Dome* or *Rotunda*, with its four galleries, is elaborately adorned with marble, carved oak, and allegorical paintings. The *Dining Room*, 150 ft. long and 90 ft. wide, is also embellished with scenes from the history of Florida, Spanish proverbs, etc. — The **Alcazar** (Pl. b), opposite the Ponce de Leon, is by the same architects and also in the Spanish style. The Casino (p. 615) includes a large **Swimming Bath*, supplied from a sulphurous artesian well. — The ***Alcazar Annex** or *Córdova Hotel* (Pl. c; formerly the *Casa Monica*), in a Hispano-Moorish style, was designed and built by *Mr. Franklin W. Smith* (see below and p. 121), who in this building and the Villa Zorayda (see below) first demonstrated the adaptability of the monolithic concrete architecture to modern buildings. It includes a fine sun-parlour, 108 ft. long. — The **Villa Zorayda*, the earliest of this group of buildings, was erected by Mr. Smith in 1883. It is in a Moorish style, with many suggestions from the Alhambra.

*St. George Street (Pl. B, 3, 4), leading to the N. from the N.W. corner of the Plaza, is one of the quaintest and most picturesque streets in the city. It passes the *Municipal Buildings* and ends at the remains of the old ***City Gate** (Pl. B, 3), consisting of two pillars, 20 ft. high, adjoined by fragments of coquina wall. On the inner side of the buttresses are two stone sentry boxes. The gate dates from the Spanish period, but its exact age is unknown. Outside the gate (to the left) is what is known (without justification) as the old *Huguenot Graveyard*. We, however, turn to the right, to visit ***Fort Marion** (Pl. B, 3), the most interesting relic of the ancient city, which lies on the Matanzas, at the N. end of the sea-wall (open free, 10-4; fee to the sergeant who acts as cicerone).

Menendez (p. 616) erected a wooden fort *(San Juan de Piños)* on or near this spot. The present fort, which is made of coquina, was building for nearly 100 years and was finished in 1756. The Spaniards named it *San Marco*, and it received its present name in 1821. The fort is laid out on the Vauban system, with bastions at the four chief angles, each protected by a watch-tower, and is surrounded by a moat and glacis. We enter by a drawbridge, over each end of which are the Spanish coat-of-arms and a Spanish inscription. Among the special features pointed out in the interior are the *Chapel*, the *Dungeon*, and the casemate from which the Seminole chief Coacoochee, who was confined here with Osceola (p. 606), made his escape during the Seminole War (1835-42).

The Sea Wall (Pl. B, 3, 4), beginning at the water-battery of the fort and extending $^3/_4$ M. to the S., affords a fine promenade (views). It is made of coquina, capped with granite, and dates from 1835-42. — At the S. end of the sea-wall are the **St. Francis Barracks** (Pl. B, 4), named from their occupying the site of the old Convent of St. Francis, some of the coquina walls of which are incorporated in the present structure. Guard-mount and dress-parade, with military music, attract many visitors. — A little farther S. is the *Military Cemetery* (Pl. B, 5), containing memorials of 'Dade's Command' (p. 629) and other soldiers who fell in the Seminole War (order of adm. necessary from the adjutant of the post). — A little to the S. is the *Flagler Hospital* (Pl. B, 5). — In St. Francis St., opposite the

barracks, is what is said, somewhat arbitrarily, to be the *Oldest House in the United States* (adm. 25 c.), built by the Huguenots (p. 616) in 1564, occupied by Franciscan monks in 1565-80, and afterwards in possession of the same family from 1590 to 1882. It has been 'restored' and contains a collection of relics connected with the history of Florida.

Among the other buildings of interest in St. Augustine are the *Public Library*, *Grace Church* (Meth. Epis.; Pl. B, 3), by Carrère & Hastings, at the corner of Cordova St. and Carrera St., and the elaborate *Memorial Presbyterian Church* (Pl. A, 3), not far from the railway-station, designed by the same architects and erected by Mr. H. M. Flagler in memory of his daughter. — The museum of the *St. Augustine Institute of Natural Science* (open to visitors) occupies an interesting old building at the corner of Treasury and Marine Sts. (Pl. B, 3).

The harbour of St. Augustine is admirably adapted for *Rowing* and *Sailing*, and excursions may be made to *Matanzas* (to the S.), up the *North River*, etc. In the ocean, 3½ M. from Matanzas, is a hot *Sulphur Spring*. Among the points of interest on the island of *Anastasia* (bridge from the foot of King St.; electric railway from the R. R. Depot, Pl. A, 4) are the *South Beach* (5 M.; comp. Pl. D, 3), the *Lighthouse*, and the old *Coquina Quarries*. *North Beach* is a favourite driving and riding resort. Fair sea-fishing (sea-bass, etc.) may be obtained here and at Matanzas. The *St. Augustine Golf Course*, beyond the old City Gate, has nine holes.

Leaving St. Augustine, the train crosses the sluggish and marshy *St. Sebastian River* and runs to the S.W., past (49 M.) *Armstrong* and (54 M.) *Hastings* (noted for its fine crops of potatoes), to (62 M.) *East Palatka*, on the bank of the St. John's.

From East Palatka a branch runs to (3 M.) *Palatka* (see p. 624). Passengers also change cars here for (4 M.) *San Mateo*, on the St. John's.

Beyond East Palatka the train turns at right angles to its former course and heads to the S.E., toward the coast, traversing a monotonous region of pine-trees and palmetto-scrub. Near (82 M.) *Espanola* the first lake of the route appears. A little short of Ormond we cross the *Tomoka River*, in the upper waters of which alligators abound.

104 M. **Ormond** (*Ormond*, open in winter only, from $ 5; *Bretton Inn*, from $ 3; *Mildred Villa*, *Granada*, $ 2), a popular winter-resort on the *Halifax River* and the ocean beach. The broad beach, as smooth and as hard as a floor, affording an unsurpassed course for driving and bicycling, stretches N. and S. for 30 M. without a break. It is a favourite resort for automobile racing, and a mile is said to have been covered here in 28⅕ sec. (1906), 2 M. in 58⅘ seconds (chief races about March). The 'sand-sailers' resemble ice-yachts (p. 85) on wheels. Inland are numerous drives, chiefly through dense 'hammock' (thick forest or jungle growth). In the midst of the hammock to the W. of the town are the ruins of an old sugar-mill reputed to have been built by Spaniards in the 16th century. Beyond *Buckhead Bluff*, on the Tomoka, is a row of cabbage

palmettoes, marking the line of the 'King's Road', which was built in the 18th century by the English from St. Mary's (Georgia) for 400 M. to the S., through Florida. The stretch of this road extending from Ormond to St. Augustine and (50 M.) Jacksonville has recently been made passable for automobiles. Excellent fishing and shooting; boating on the Halifax, 24 M. long and $1/2$ M. wide, and up the Tomoka (steam-launches).

110 M. **Daytona** (*Colonnades*, $ 3-4; *Clarendon*, burned down in 1909, these at Seabreeze or East Daytona; *Ridgewood*, *Despland*, from $ 3; *Palmetto*, $ 3; *Grand Atlantic*, *Parkinson Ho.*, from $ $2^1/_2$; *Seaside Inn*, at Goodall, from $ $2^1/_2$) is another favourite resort on the Halifax River, with (1905) 2200 inhab., fine trees, a good beach, a pier, and the winter-homes of many wealthy Northerners. It was originally a New England settlement. A beautiful driveway leads to Ormond, and the return may be made on the hard ocean-beach (p. 618). — 115 M. *Port Orange*. The pine-forests through which we have been travelling grow sparser and the palmetto-scrub grows thicker. At mile-post 119 the train crosses a broad inlet from the Halifax.

125 M. **New Smyrna** (*Ocean Ho.*, from $ 3), on the *Indian River North*, frequented by sportsmen, was founded in 1769 by a colony of 1500 Minorcans and Greeks established for the culture of indigo and sugar by an Englishman named Turnbull (see p. 616). An ancient ruin, part of the stone walls of which are standing, is believed by many antiquarians to be the remains of a chapel built by men with Columbus on his second voyage, in 1496 or 1497. Shell mounds and other prehistoric remains have been found. Good fishing, shooting, and boating. On the peninsula opposite New Smyrna is *Coronado Beach*, a popular all-the-year-round resort.

From New Smyrna to Orange City Junction, 27 M., railway in 1 hr. — 21 M. *Lake Helen* (Harlan Hotel, $ 3) is the seat of the 'Southern Cassadaga Spiritualists' assembly. — 26 M. *Orange City*. — 27 M. *Orange City Junction*, connecting with the Atlantic Coast Ry. (see p. 626).

Beyond (136 M.) *Oak Hill* we catch on the left the first glimpse of the **Indian River**, parallel with which, and frequently within sight, the line runs for the next 143 M. A vast marsh and a forest of cabbage palmettoes are traversed, and then for several miles the track skirts the river, here a broad bay, the farther shore dimly discernible.

The Indian River, 160 M. in length from its head to the S. end at Jupiter Inlet, is the most important of the so-called 'rivers', but really long narrow sounds or lagoons, that run parallel with the Atlantic Ocean nearly all the way from the mouth of the St. John's to Biscayne Bay. They are separated from the ocean by a narrow strip of land, broken by a few inlets, and vary in width from 50 yds. to about 6 M. The *Matanzas* (p. 615), the *Halifax* (p. 618), *Indian River North* (see above), and *Lake Worth* (p. 621) all belong to this series of lagoons. If the sounds were continuous, there would be only one river some 310 M. in length. Their continuity is broken at various places, the intervals in which no water-way exists ranging in length from about 600 yards to 24 M. Across some of the shorter

isthmuses, as well as from Lake Worth to Biscayne Bay, canals have been constructed, while others are now in progress (see below). The usefulness of the sounds for shipping, however, is limited by their shallowness. The greatest depth does not much exceed 12 ft., while the minimum depth (after the under-noted improvements are completed) will be about 5 or 6 ft. The water of these lagoons is salt, greatly freshened by the rivers that flow into them.

The banks of the Indian River are lined with luxuriant semi-tropical vegetation, which affords cover to large and small game, including bears, pumas (p. 611), wild-cats, deer, and turkeys, while the water teems with fish. The water is often highly phosphorescent at night. The Indian River oranges (groves on the W. shore) are celebrated.

An inside route, much frequented by motor-boats, now extends from St. Augustine to Miami. It leads down the *Matanzas River* (p. 615), then through a canal (16 M. long) to the head of the *Halifax River* (p. 618), and thence through that river and the *Mosquito Lagoon* (or *Lower Halifax*). This lagoon is connected with the *Indian River* by a canal, 1½ M. long, and the river itself has been dredged and deepened. Beyond *Jupiter Inlet* (p. 621) the route proceeds through the *Lake Worth Creek* (straightened) and a canal to *Lake Worth* (p. 621), which is entered about 10 M. to the N. of *Palm Beach* (p. 621) To the S. of Lake Worth the water-way consists of about 40 M. of canals and improved channels, passing through *Hillsborough* and *New River Sounds* and finally entering *Biscayne Bay* (p. 622), about 16 M. to the N. of *Miami* (p. 622).

154 M. **Titusville** (*Indian River*, from $ 2½), with (1905) 950 inhab. and a considerable fish and oyster trade, is practically at the head of the Indian River (p. 619) and is the usual starting-point of boating parties. It is also the junction of a line to Sanford.

From Titusville to Sanford, 47 M., *Florida East Coast Railway* in 2½-3 hrs. (fare $ 1.40). This line runs towards the N.W., passing several small stations. 36 M. **Enterprise** (*Brock Ho.*, $ 2½), on the N. bank of *Lake Monroe*, opposite Sanford (p. 626), has some fame as a winter-resort. At (40 M.) *Enterprise Junction* we join the Atlantic Coast Line (p. 626). — 47 M. *Sanford*, see p. 626.

169 M. *City Point;* 173 M. *Cocoa* (see below).

175 M. **Rockledge** (*Indian River*, $ 3-6; *Plaza*, *New Rockledge*, from $ 3; *White's Cottage*, $ 2), a favourite resort on the Indian River, is delightfully situated on high ground rising from the W. bank of the river, here 1¼ M. wide. Beyond lies *Merritt's Island*, which is separated from *Cocoa Beach* or *Oceanica*, on the Atlantic, by the *Banana River*. Coquina rock formation (p. 616) on the river-bank suggests the name of the place. A shell-road connects Rockledge with Cocoa. Yachts of all kinds dot the river during the season; the fishing is excellent, and alligator hunts are frequently organized. Rockledge is the chief home of the famous Indian River oranges (comp. above).

For the next 60 M. the line traverses an uninteresting stretch of white sand, producing scattered pine-trees and abundant scrub palmetto. The infrequent villages lie between the railway and the river. — We cross small creeks at (190 M.) *Eau Gallie*, (194 M.) *Melbourne* (Carleton, $ 2½-3), and (200 M.) *Malabar*. In approaching (215 M.) *Sebastian*, we cross the *Sebastian* by a long draw-bridge. Near (239 M.) *St. Lucie* is an agricultural settlement of French aristocrats, formed in 1905 in consequence of the politico-religious

troubles in France. — 242 M. *Fort Pierce* (Fort Pierce Hotel, $ 2½) is a trading point for the Seminole Indians and one of the headquarters of tarpon-fishing (p. 611). We enter the pineapple region (p. 611). For 15 M. the railway is bordered by pineapple plantations, most of them unprotected, some under sheds. The largest plantations in this neighbourhood are at (254 M.) *Eden* and (257 M.) *Jensen.* — Between Jensen and (261 M.) *Stuart* the line curves away from the Indian River and crosses the broad estuary of the *St. Lucie River.* — At (283 M.) *West Jupiter* we cross the *Jupiter River*, with a view (left) of Jupiter lighthouse, the Nassau (p. 622) cable-station, Jupiter Inlet, the mouth of Indian River, and breakers on the beach.

Jupiter Inlet (good fishing) lies at the S. end of the Indian River and is protected by a *Lighthouse*, the *View from which is very extensive. About 1 M. to the S. is a *U. S. Life-Saving Station.* The mangrove thickets and curious arboreal forms are interesting. The Inlet is connected by a short canal with Lake Worth (see below).

Beyond West Jupiter the country is tame to (299 M.) *West Palm Beach* (Palms, $ 2½-4; Seminole, Holland, $ 2-3). We cross Lake Worth on a bridge ½ M. long. To the left lies *Munyon's Island* (Hotel Hygeia, $ 2½-5), recently frequented by Northern visitors.

300 M. **Palm Beach.** — *Royal Poinciana Hotel, an immense structure in the Colonial style, with a frontage of 1000 ft. and room for 1700 guests, from $ 5; *Palm Beach Hotel, with 500 beds, from $ 3; *The Breakers, with 300 beds, from $ 4; Hibiscus, from $ 2½; also several smaller hotels and boarding-houses.

Palm Beach, situated on the narrow strip between *Lake Worth* (22 M. long and ½-1 M. wide) and the Atlantic Ocean, ranks as one of the most fashionable winter-resorts of the United States, and in some respects rivals the resorts of the Mediterranean. The season, extending from Christmas until April 10th, is at its height in March, when the hotels are crowded. Unlimited wealth has made of the surroundings of the chief hotels a vast semi-tropical paradise. The *Royal Poinciana* (named for a tree with gorgeous flowers, blooming in summer) and the *Palm Beach Hotel* face Lake Worth, while the *Breakers* (with its cottages), with which they are connected by a wide avenue of palms, ½ M. long, faces the ocean. The grounds are filled with bearing cocoanut-trees, palms of many varieties, and countless foliage and flowering plants and shrubs, and are adjoined by gardens in which bananas, guavas, grape-fruit, avocado pears, custard apples, maumee apples, mangoes, and pawpaws come to maturity. The cupola of the Poinciana yields an entrancing view (esp. at sunset), including the entire length of Lake Worth, with the villas on its banks, the narrow peninsula, clad in tropical verdure, between the lake and the ocean, the Atlantic stretching away to the E. horizon, and the mysterious Everglades (p. 612) on the W. Near the Poinciana is *Whitehall*, the residence of Mr. H. M. Flagler (p. 618), to whose enterprise is due the wonderful railway across the Keys (p. 622). Adjoining the Palm Beach Hotel is the *Pavilion*, with a large swim-

ming pool. A long pier extending into the ocean affords opportunities for fishing (tarpon, etc.). Lake Worth is also a favourite yachting rendezvous, and a famous motor-boat regatta is held here. The *Palm Beach Golf Links* (18 holes) are deservedly popular. Bicycle-chairs and 'rickshaws' are much in vogue for locomotion.

Leaving Palm Beach, the train re-crosses Lake Worth and turns to the S. Pineapple plantations are occasionally passed. The soil is light sand, almost pure white. 312 M. *Boynton* (The Boynton, $2-3); 341 M. *Fort Lauderdale*, on the N. bank of the *New River*. — 351 M. *Hallandale*, with great fields of garden truck, particularly tomatoes. Bananas thrive. — 357 M. *Arch Creek*, with a natural bridge of solid coquina rock (p. 616); 362 M. *Lemon City*.

366 M. **Miami.** — Royal Palm Hotel, occupying the point of land between the Miami River and the Bay and surrounded by an immense grove of cocoanut-trees, from $ 5, sometimes crowded; Halcyon Hall, from $ 4; Iroquois, *San Carlos, Gralyn House, from $ 2½. — *Omnibus* 25 c.

Miami is one of the oldest towns in the State. It was organized as a modern city in 1896, and in 1900 had a population of 1680, which number is greatly enlarged during the winter tourist season. Miami is situated on the N. bank of the *Miami River*, where it enters *Biscayne Bay*, a large sheet of clear salt water, separated from the ocean by the first of the long chain of Florida Keys. The bay has been dredged and improved by the U. S. Government, and the harbour now admits vessels of considerable size. Miami has a balmy climate and dense tropical vegetation, and the soil produces a great variety of tropical and semi-tropical fruits and vegetables. The *Fishing* is good. The *Golf Links* are very flat. An interesting excursion may be made by boat up the Miami River to the beginning of the *Everglades* (p. 612), the home of the Seminole Indians who often paddle down to the town to sell baskets, etc.

The objects of interest at both Miami and Palm Beach include collections of alligators and crocodiles.

The *Peninsular & Occidental Steamship Co.* runs a steamer tri-weekly in winter from Miami to (185 M.) *Nassau* (Colonial, from $ 5; Royal Victoria, from $ 4), in the *Bahama Islands* (15 hrs.; fare $ 15, return-fare $ 26, incl. berth and meals).

Beyond Miami the line turns inland (W.). 371 M. *Cocoanut Grove* (Peacock Inn, $ 2½-3½), a boating, fishing, and shooting resort on *Biscayne Bay*. Adjacent are the well-known Adirondack-Florida School and the home of Mr. Kirk Munroe. — 382 M. *Perrine* is the station for *Cutler* (Richmond, $ 3), on Biscayne Bay, within easy reach of the Everglades (p. 612); 394 M. *Homestead;* 409 M. *Manata*. At (416 M.) *Jewfish* the train leaves the mainland and crosses a drawbridge over *Card Sound*, leading to *Key Largo*, the largest of the 'Keys' (30 M. long; see below).

From this point on the construction of the railway is of great interest. It follows the line of the so-called 'Keys' (Span. 'Cayos'), or small coralline islands, which stretch towards the S.W. from the S. extremity of Florida. The gaps between the different islands are traversed by concrete viaducts,

sometimes several miles in length. The journey is much like a trip at sea, with the Gulf of Mexico on one side and the Straits of Florida on the other. The terminus will be at *Key West* (see below), 524 M. from Jacksonville and only 90 M. from *Havana* (p. 662).

The Keys produce large quantities of pineapples, bananas, and other fruit and vegetables; but the natives, who are known as 'Conchs', devote themselves mainly to the sponge and other fisheries. About fifty of the Keys are inhabitable.

Cocoa-nut palms are numerous as we run along the Keys. We cross narrow inlets at (432 M.) *Tavernier* and (435 M.) *Plantation*. Beyond (460 M.) *Islamorada* we cross a longer viaduct and bridge, connecting *Upper* and *Lower Matecumbe Keys*. The latter is connected with (458 M.) *Long Key* by a concrete viaduct, and another many-arched viaduct (2 M. long) leads thence to (462 M.) *Grassy Key*. 472 M. *Key Vaca;* 475 M. *Knight's Key*.

478 M. *Knight's Key Dock;* the present terminus of the line.

Besides the Key West steamer (see below), boats of the P. & O. S. S. Co. run thrice weekly from Knight's Key Dock to (120 M.) *Havana* (10 hrs. fare $ 17.10).

The KEY WEST STEAMER runs along the S. side of the Keys, reaching its destination in ca. 4 hrs.

Key West (*Jefferson*, from $ 2; *Cripe Hotel*, $ $1\frac{1}{2}$-$2\frac{1}{2}$; *El Polaco*, Spanish restaurant; Brit. vice-consul, *Mr. W. J. H. Taylor;* tramways; carr. $ 1 per hr.), the future terminus of the Florida East Coast Railway, is the third city of Florida, containing 20,498 inhab. in 1905. The name is said to be a corruption of the Spanish *Cayo Hueso* ('Bone Island'), which took its rise from the finding of numerous human bones here by the Spanish mariners. Many of the inhabitants are Cubans, who have established cigar-factories that now produce 125-150 million cigars annually. Other important industries are the sponge-fishery, turtle-catching, and deep-sea fishing (mullet, etc.). The fine harbour is protected by *Fort Taylor*, built on a small island, and also by more modern fortifications. A visit may be paid to the *Banyan Tree* adjoining the *U. S. Barracks*. Key West is not so warm as many places to the N. of it (range 50-96°; mean for winter ca. 70°), though artificial heat is unused except for cooking; and its pure air attracts many winter-visitors. On the S. Beach is the pleasure-resort named *La Brisa*.

Steamers ply regularly from Key West to *Port Tampa* (p. 628), *New Orleans* (p. 631), *Galveston* (p. 594) and *New York* (p. 11). — The steamer from Port Tampa to *Havana* (see p. 628) calls at Key West, whence it takes ca. 10 hrs. to reach its destination (fare $ $12\frac{1}{2}$).

Sand Key, 7 M. to the S.S.W. of Key West, is the southernmost point of the United States and has a Weather Bureau Station.

105. The St. John's River.

Comp. Map, p. 615.

The STEAMERS of the *Clyde's St. John's River Line* leave Jacksonville thrice weekly at 3.30 p.m. for *Palatka*, *Astor*, *Beresford (De Land)*, *Sanford* (17 hrs.; fare $ 3.75, incl. meals and berth), and *Enterprise* (18 hrs.; same fare). Other steamers run to *Green Cove Springs*, *Palatka* and *Crescent City*,

and *Mayport* (p. 615; daily). — Travellers who start from St. Augustine may join the steamer at Palatka (railway from St. Augustine, 28 M., in 1¼-1½ hr.).

There is no great variety in the scenery of this trip, but visitors to Florida snould make part of it at least for the sake of the picture it affords of luxuriant semi-tropical vegetation, with occasional glimpses of alligators. The St. John's River is about 400 M. long, and its lower course resembles a series of lakes ½-6 M. wide. Parts of the upper river are well-nigh choked with water-hyacinths *(Eichhornia azurea)*.

The terms right (r.) and left (l.) in the following route are used with reference to travellers ascending the river.

Jacksonville, see p. 614. The following are some of the chief points passed. — 10 M. (r.) *Black Point.* — 14 M. (r.) *Orange Park* (rail. station). — 15 M. (l.) *Mandarin*, formerly the winter-home of Mrs. Harriet Beecher Stowe. — 24 M. (r.) *Magnolia Point*, one of the highest bluffs on the river. — 24½ M. (r.) Mouth of *Black Creek*, navigable for 8 M. — 25 M. (l.) *Remington Park.*

28 M. (r.) **Magnolia Springs** (*Hotel*, from $ 4; rail. stat.), a favourite resort of consumptives, amid pines and orange-groves.

30 M. (r.) **Green Cove Springs** (*Rivercroft*, $ 2½-6; *Riverside*, $ 2-2½), a favourite resort, with a copious sulphur-spring (78°), used both for bathing and drinking. A beautiful path leads along the river to (2 M.) *Magnolia.* — 38 M. (l.) *Hogarth's Landing.* — 44 M. (l.) *Picolata*, an old Spanish settlement. — 49 M. (l.) *Tocoi*, the junction of a (disused) railway to (18 M.) St. Augustine (p. 615). — 63 M. (l.) *Orange Mills*, with fine orange-groves.

75 M. **Palatka** (*Saratoga*, $ 2½; *Graham*, R. from $ 1; *Arlington*, $ 2; tramway between railway-station and steamer-landing 5 c.), the largest town on the St. John's above Jacksonville (3950 inhab. in 1905), is pleasantly situated and attracts many winter-visitors. It is a railway-centre of some importance, and is the starting-point of the small steamers which ascend the *Ocklawaha* (p. 625) and of others for *Drayton Island* (see below).

From Palatka to *Rockledge, Palm Beach*, and *Miami*, see R. 104; to *Sanford*, see R. 107 a; to *St. Augustine*, see p. 618; to *Jacksonville* (by railway), see p. 626. Lines also run hence to *Lake City* and *Macon* (pp. 630, 611) and to *Gainesville* (p. 628) and *Ocala* (p. 628).

Above Palatka the vegetation becomes more luxuriant and tropical in character, including cypresses, orange-trees, magnolias, palmettoes, water-oaks *(Quercus aquatica)*, azaleas, vines of all kinds, etc. The river becomes narrow and winding.

76 M. (l.) *Hart's Orange Grove*, one of the most productive in Florida. — 82 M. (l.) *Dunn's Creek*, up which the *Crescent Lake* steamer plies to *Crescent City.* — At (85 M.) *Buffalo Bluff* the railway crosses the river (p. 626). — 93 M. (l.) *Satsuma*, with fine orange-groves. — 100 M. (l.) *Welaka* (McClure Ho., $ 2), on the site of Indian and Spanish settlements, is nearly opposite the mouth of the *Ocklawaha* (p. 625). — 106 M. (r.) *Fort Gates.* The river now expands into **Lake George*, 12 M. long and 9 M. wide. *Drayton Island* has fine orange-groves. To the right is the outlet of *Lake*

Kerr. On leaving Lake George we enter another narrow stretch of river. — 134 M. (l.) *Volusia*, on the site of an early Spanish mission. (r.) *Astor* (p. 628). A little farther on we cross *Dexter Lake.* — From (162 M.) *Beresford* (l.) a short branch-line runs viâ *De Land Junction* to *De Land* (College Arms, $ 3-5; Putnam, $ 2-3), with the *John B. Stetson University* (485 students). — 168 M. (l.) *Blue Spring*, with a singular spring. We now reach the most picturesque part of the river. — 174 M. (r.) Mouth of the *Kissimmee River* (not to be confounded with that mentioned at p. 627).

Farther on the steamer passes another railway-bridge and enters *Lake Monroe*, 5 M. in diameter, on the S. side of which lies (193 M.) **Sanford** (p. 626) and on the N. (198 M.) **Enterprise** (p. 620).

Above Lake Monroe the St. John's River is navigable for a considerable distance by steam-launches, and sportsmen and tourists occasionally go on as far as *Lake Harney* (guides, etc., obtainable in Sanford).

106. The Ocklawaha River.

Comp. Map, p. 615.

Steamers of the *Hart Line* leave *Palatka* on Mon., Wed., & Frid. at 12.30 p.m. in the season for (135 M.) *Silver Springs* (20 hrs., down stream 15 hrs.; fare $ 7, incl. meals and berth). The steamers, though necessarily small, are fairly comfortable.

This trip should not be omitted by any visitor to Florida. The **Ocklawaha ('dark, crooked water'), issuing from *Lake Griffin*, near the centre of Florida, joins the St. John's River (see above) after a course of 280 M., of which about 200 M. are navigable by small steamers. It is exceedingly tortuous, flows nearly all the way through a vast cypress-swamp, and has no banks except the tree-trunks rising from the water. The moss-draped cypresses produce a most weird and picturesque effect, especially when lighted up by the level rays of the rising or setting sun or by the flaming pine-knots or electricity used to help navigation at night. Alligators, snakes, turtles, water-turkeys, herons, egrets, and other birds of brilliant Southern plumage abound on its banks. No shooting is allowed from the steamers. The steering-apparatus is interesting. — The trip may also be made in the reverse direction.

From Palatka to (25 M.) *Welaka*, see p. 624. Our steamer now leaves the St. John's River and turns to the right (W.) into the narrow *Ocklawaha*. The following are some of the chief landings, though none are of any size or importance.

32 M. *Davenport;* 48 M. *Blue Spring;* 58 M. *Fort Brooke.* — At (59 M.) *Orange Springs* the Ocklawaha is joined on the right by the *Orange Creek* and bends abruptly to the left (S.). — About 5 M. farther on we pass a double-headed palmetto. — 75 M. *Iola;* 78 M. *Forty Foot Bluff;* 87 M. *Eureka.* — At (88 M.) the **Cypress Gate* we pass between two huge cypresses, barely leaving room for the steamer. About 7 M. farther on we pass a *Twin Cypress* (left), where two trees have grown into one. 101 M. *Hell's Half Acre* (island); 103 M. *Gore's;* 104 M. *Osceola's Old Field* (comp. p. 617); 106 M. *Durisco's.* A landing is generally made at (118 M.) *Randall's Orange Grove* (oranges, lemons, figs, and roses).

Farther on (126 M. from Palatka) we leave the muddy Ocklawaha, emerge from the woods, and ascend the crystal-clear *Silver Springs Run* to the right.

135 M. **Silver Springs** (*Brown Ho.*, $ 2), the largest and one of the most beautiful of the springs of Florida, claims to be the 'Fountain of Youth' of which Ponce de Leon was in search (p. 616). The water is wonderfully transparent, small objects being distinctly seen at the bottom (60-80 ft. deep). The spring discharges thousands of gallons of water hourly. The visitor should row round the pool in one of the glass-bottomed boats.

Silver Springs is a station on the Seaboard Air Line, connecting viâ *Ocala* (p. 628), 6 M. to the W., with all parts of the State.

The upper part of the Ocklawaha, above Silver Springs Run (see above), is seldom visited by the tourist.

107. From Jacksonville to Tampa.

Comp. Map, p. 615.

a. Viâ Palatka and Sanford.

239 M. Atlantic Coast Railway in 8-9 hrs. (fare $ 5.80; sleeper $ 2). *Port Tampa* (p. 628), the starting-point of steamers to Key West and Havana, is 9 M. (1/2 hr.) farther on. Through-sleepers from New York to Port Tampa run on this route (comp. p. 611).

From *Jacksonville* (p. 614) to Palatka the line follows the left (W.) bank of the *St. John's River* (p. 623), which, however, is seldom in sight. 28 M. *Magnolia Springs* (p. 624); 30 M. *Green Cove Springs* (p. 624); 40 M. *West Tocoi* (comp. p. 624). — 55 M. **Palatka** (p. 624).

At (63 M.) *Buffalo Bluff* the train crosses to the E. bank of the St. John's. Numerous orange-groves are passed. 83 M. *Seville* (Grand View, $ 2), with a picturesque little station. *Lake George* (p. 624) lies 4 M. to the W. — 99 M. *De Leon Springs.* From (107 M.) *De Land Junction* a short line extends to (4 M.) *De Land* (p. 625), and at (112 M.) *Orange City Junction* we connect with that from *New Smyrna* (p. 619). — At (118 M.) *Enterprise Junction* diverges the line to *Enterprise* and *Titusville* (p. 620).

Our line now crosses the St. John's River as it issues from *Lake Monroe* (p. 625). 121 M. *Monroe.*

125 M. **Sanford** *(Sanford Ho.*, from $ 2; *Wilton*, $ 2-3; *Rail. Restaurant)*, a thriving little city with (1905) 2825 inhab., is of some importance as the practical limit of navigation on the St. John's River and the junction of several railways. It lies on the S. side of *Lake Monroe*, in which fair fishing is obtained.

From Sanford to Tarpon Springs and St. Petersburg, 150 M., *Atlantic Coast Line* (no through-trains). — 14 M. *Palm Springs;* 23 M. *Clarcona;* 28 M. *Crown Point*, with lemon-groves; 33 M. *Oakland*, on *Lake Apopka*, with large orange-groves; 44 M. *Clermont*, on *Lake Mineola*, a tomato-growing centre; 53 M. *Mascotte.* At (75 M.) *Trilby*, where we cross the W. coast route from the N. to Tampa (see p. 628), the line changes from narrow gauge to standard gauge. The town lies on *Lake Du Maurier*, and its streets

are named after the characters in the well-known novel. — 119 M. **Tarpon Springs** (*The Oaks*, *The Ferns*, $ 2), a pleasant resort on the Gulf Coast, near the mouth of the *Anclote River*. The late Duke of Sutherland's manor lies 2 M. to the N.E. On the Anclote River, 3 M. to the W., is *Sponge Harbor*, whence large quantities of sponges are exported. — 124 M. *Sutherland* (San Marino, $ 2-4), a favourite winter-resort. — Beyond (129 M.) *Dunedin* the train traverses the *Pinellas Peninsula*, between Old Tampa Bay and the Gulf of Mexico. — 133 M. **Belleair** (*Belleview*, from $ 5) is a new winter-resort overlooking *Clearwater Bay*. — 150 M. **St. Petersburg** (*Detroit*, *Huntington*, from $ 2½), a good fishing-station on Tampa Bay. Steamers ply from (151 M.) *St. Petersburg Wharf* to *Port Tampa* (p. 628) and the *Manatee River*.

From Sanford to *Jacksonville* by steamer, see R. 105. Sanford is also connected by railway with *Lake Charm* and with *Tavares* (on *Lake Eustis*) and *Leesburg* (p. 629).

Beyond Sanford we traverse a country thickly sprinkled with lakes. — 143 M. *Winter Park* (Rogers Ho., $ 2½-3), a charming winter-resort, surrounded by lakes (boating and fishing). — 148 M. **Orlando** (*San Juan*, from $ 3; *Tremont*, *Wyoming*, from $ 2½), a busy little city with (1905) 3510 inhab., affords good headquarters for guides and sporting supplies. — 166 M. *Kissimmee* (Kissimee Hotel, from $ 2; Park, $ 2), on *Tohopekaliga Lake*, is another good hunting centre. It is the headquarters of the *United Land Co.*, which has done much to reclaim the swampy land to the S. Sugar is raised at *St. Cloud*, a little to the S.E. (branch-line).

The *Kissimmee River*, issuing from Tohopekaliga Lake, flows through *Lake Kissimmee* to the large *Lake Okeechobee*, which connects with the Gulf of Mexico by a canal and the *Caloosahatchee River*.

From (193 M.) *Bartow Junction* a branch-line runs to the S. to (17 M.) *Bartow*, (90 M.) *Punta Gorda*, and (118 M.) *Fort Myers*.

Punta Gorda (*Punta Gorda Hotel*, open in winter, from $ 3½; *Dade Ho.* open in summer, $ 2; Brit. vice-consul, *Mr. A. F. Dewey*), on *Charlotte Harbor*, is resorted to by sportsmen and fishermen, who obtain good sport on the *Peace River* and in the harbour. The best fishing-ground for tarpon (p. 611) is within easy reach.

207 M. *Lakeland* (215 ft.; Tremont Ho., $ 2½-3; Matanzas, $ 2) is the junction of another line to Bartow (and Punta Gorda) and also of the W. coast line from the N. (comp. p. 628). At (218 M.) *Plant City* we cross the Seaboard Air Line (comp. p. 629).

239 M. **Tampa** (*Tampa Bay Hotel*, with 500 rooms, a theatre, a swimming bath, and golf-links, from $ 4, variously reported on; *De Soto*, *Almeria*, from $ 2½; *Palmetto*, from $ 2), the most important commercial city on the Gulf Coast of Florida, with (1905) 22,825 inhab. (incl. West Tampa), lies at the head of *Hillsborough Bay* (the E. branch of Tampa Bay) and at the mouth of the *Hillsborough River*. It is surrounded with lemon and orange groves and has become one of the favourite health-resorts in Florida, especially since the opening of the huge and handsome Tampa Bay Hotel (façade of 511 ft.). The bay swarms with fish, including the tarpon (p. 611), and with water-fowl, while deer and other game are found inland. Cigar-making is the leading industry.

About 20 M. to the S.E. of Tampa, at *Indian Hill*, are some curious shell-mounds in which human remains were found.

248 M. **Port Tampa** (**The Inn*, R. from $ 1; Brit. vice-consul, *Mr. James W. Morris*), on the peninsula separating Hillsborough Bay from *Old Tampa Bay*, is the starting-point of steamers to *Key West* and *Havana*, and various points on *Tampa Bay*, etc. To reach deep water the railway has to run into the bay on trestle-work for nearly 1 M., and at the end of this is the pier, with the inn and other buildings.

The Peninsular & Occidental S. S. Co.'s steamers for *Havana* (p. 661) run thrice weekly (31-32 hrs.; fare $ 24.85; comp. p. 623).

b. Viâ Palatka and Ocala.

263 M. Atlantic Coast Line in 12-13 hrs. (fares as at p. 626).

From Jacksonville to (55 M.) *Palatka*, see R. 107a. Our line now runs towards the W., passing some wayside stations. At (93 M.) *Rochelle* we diverge to the left from the line to (32 M.) *High Springs* (p. 612) and run towards the S. — From (99 M.) *Micanopy Junction* a branch-line runs W. to (8 M.) *Tacoma*, and from (106 M.) *Proctor* another runs to (6 M.) *Citra* (p. 629).

124 M. **Ocala** (*Ocala Ho.*, from $ 3; *Montezuma*, from $ 2), a thriving little city (4493 inhab. in 1905), in one of the most fertile districts of Florida. Large phosphate beds are worked in the vicinity. Ocala is also a station on the Seaboard Air Line (see below) and the starting-point of a branch of the Atlantic Coast Line to *Dunnellon* (on the *Withlacoochee River*), *Crystal*, and (48 M.) *Homosassa*, on the Gulf of Mexico. Line to *Silver Springs*, see p. 626.

At (158 M.) *Leesburg*, the junction of a line to *Astor* (p. 625), we bend to the S.W. 185 M. *St. Catherine* (p. 629). From (187 M.) *Croom* a branch-line runs to (10 M.) *Brooksville*. At (197 M.) *Trilby* (p. 626) we cross the line from Sanford to St. Petersburg. At (231 M.) *Lakeland* (p. 627) we join the route above described and follow it to (263 M.) **Tampa** (p. 627).

c. Viâ Waldo and Ocala.

212 M. Seaboard Air Line Railway in 8½-11 hrs. (fares as at p. 626; to Ocala $ 3, to Cedar Key $ 5.35).

At (19 M.) *Baldwin* this line diverges to the left (S.) from the line to Tallahassee and New Orleans (see R. 108) and joins the line from Fernandina (p. 615) to Tampa. 33 M. *Highland;* 38 M. *Lawtey*, with orange-groves and strawberry-farms. 45 M. *Starke* is the junction of a branch-line to (56 M.) *Wannee*. At (51 M.) *Hampton* we cross the railway from Palatka (p. 624) to Macon (p. 611). — 56 M. **Waldo** (*Waldo Ho.*, $ 2) is the junction of a branch-line to Cedar Key (see below).

From Waldo to Cedar Key, 71 M., railway in 3 hrs. — 14 M. Gainesville (*Brown Ho.*, from $ 2), a city and winter-resort with (1905) 5413 inhab., is the junction of railways to Palatka, Ocala, Live Oak, etc. Excursions may be made to the *Alachua Sink* (alternately lake and prairie) and other natural curiosities. — From (28 M.) *Archer* a branch-line leads through

a rich phosphate district to *Eagle Mine* (phosphates). — 71 M. Cedar Key (*New Palmetto, Schlemmer*, $ 2), a town of (1905) 932 inhab., lies on a small 'key' (comp. p. 622) off the W. coast of Florida and has a harbour which admits vessels of 12 ft. draught. It carries on a trade in fish, turtle, oysters, and sponges, and cuts red cedar for lead pencils. Steamers ply hence to the Suwanee River, etc. — The Suwanee River, well known from the negro song of 'The old folks at home' (by *S. C. Foster*), enters the Gulf of Mexico about 15 M. to the N.

At (71 M.) *Hawthorne* we intersect the line from Palatka to Gainesville (see p. 624). Farther on we skirt *Loch Loosa* and cross the E. branch of *Orange Lake*, on the S. shore of which we traverse, for nearly 1 M., the so-called *Mammoth Orange Groves*, now greatly reduced in size (comp. p. 611). 83 M. *Citra* (p. 628). From (98 M.) *Silver Springs Junction* a branch-line runs to (2 M.) *Silver Springs* (see p. 626). — 102 M. **Ocala**, the junction of the Atlantic Coast Line, see p. 628. — From (127 M.) *Wildwood* a line runs to *Leesburg, Tavares, Orlando*, and *Lake Charm.* 135 M. *Panasoffkee*, at the S. end of the lake of that name. About 4 M. to the N. of (146 M.) *St. Catherine* (junction of the Atlantic Coast Line) is the spot where Major Dade and his detachment of 110 men were surprised and slain by the Seminoles on Dec. 28th, 1835, only three soldiers escaping alive. — At (156 M.) *Lacoochee* we touch the Atlantic Coast line from Sanford to St. Petersburg (see p. 626). Near (164 M.) *Dade City* is the pretty *Pasadena Lake.* 189 M. *Plant City* see p. 627; 194 M. *Turkey Creek*, the junction of a branch-line to Fruitville (see below); 210 M. *Ybor City*, with large tobacco-factories.

212 M. **Tampa**, see p. 627.

From Turkey Creek to Fruitville, 60 M., in 2½-4½ hrs. This new line opens up the '*Manatee Country*', a fertile orange-growing district, below the 'frost-line'. It also offers good shooting and fishing. — 5 M. *Durant;* 11 M. *Boyett;* 16 M. *Balm;* 26 M. *Willow;* 32 M. *Parrish;* 36 M. *Erie;* 39 M. *Terra Ceia Junction*, for (5½ M.) *Terra Ceia;* 42 M. *Ellenton.* — 48 M. *Palmetto*, on the *Manatee River. Braden Castle*, near here (now in ruins), and the *Gamble Mansion*, near Ellenton (see above), were the two chief establishments of the early sugar-planters in this region. — 44 M. *Manatee*, on the S. bank of the river. — 46 M. **Bradentown** (*Hotels*), the county-seat, a pleasant little place with (1905) 1491 inhab and a steamboat-dock. — 48 M. *Oneco;* 56 M. *Sarasota* (De Soto Hotel, from $ 2), on *Sarasota Bay.* — 60 M. *Fruitville.* The line is to be prolonged to *Punta Gorda* (see p. 627).

108. From Jacksonville to Tallahassee, Pensacola, and New Orleans.

614 M. Seaboard Air Line Railway to (208 M.) *River Junction* in 8 hrs.; Louisville & Nashville R. R. thence to (406 M.) *New Orleans* in 14-15 hrs. through-carriages; fare $ 19.35; sleeper $ 3.50).

Jacksonville, see p. 614. The line runs nearly due W. At (19 M.) *Baldwin* we cross the line from Fernandina to Tampa and Cedar Key (see R. 107c). Beyond (28 M.) *Macclenny* we cross the S. fork of the *St. Mary's River.* The Confederates defeated the Federals at

(47 M.) *Olustee* on Feb. 20th, 1864. — 59 M. *Lake City* (Central Ho., Blanche Hotel, $ 2), embosomed in trees, is the seat of the State Agricultural College and a U. S. Experimental Station and the junction of lines to *Palatka* (p. 624), *Gainesville* (p. 628), *Macon* (p. 611), etc. It is surrounded by lakes and lakelets. — At (81 M.) *Live Oak*, 8 M. to the N. of which lie *Suwanee Springs*, we intersect the W. coast route of the Atlantic Coast Line (p. 612), and at (95 M.) *Ellaville* we cross the rushing *Suwanee River* (p. 629). Beyond (123 M.) *Greenville* we cross the *Aucilla*. From (138 M.) *Drifton* a line runs N. to (4 M.) *Monticello* and *Thomasville* (p. 612). 147 M. *Lloyd* (Rail. Restaurant, meals 75 c.). The country now becomes more hilly.

165 M. **Tallahassee** (*Leon*, $ 2-3; *St. James*, $ 2), the capital of Florida, is finely situated among trees, on a hill rising 280 ft. above the sea. Pop. (1905) 3311. The chief buildings are the *Capitol*, *Court House*, and *West Florida Seminary*. The gardens are especially beautiful in the time of roses. The *Episcopal Cemetery* contains the grave of Prince Achille Murat (d. 1847), son of the King of Naples, who married a Virginian girl and settled near Tallahassee.

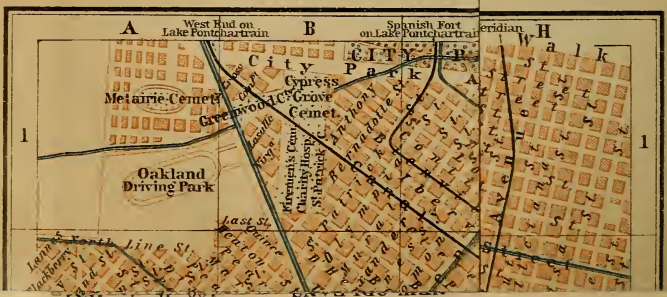
Pleasant drives may be taken to (6 M.) *Lake Jackson* (fishing), *Lake Iamonia* (12 M.), *Lake Miccosukie* (18 M.), *Bellair* (6 M.), and the Wakulla Spring (15 M. to the S.). The spring (4½ M. from *Wakulla Station*, on the branch-line to *St. Mark's*) is 106 ft. deep and of wonderful transparency. It may also be reached by boat from St. Mark's (2 hrs.).

From Tallahassee the Georgia, Florida, & Alabama Railway runs to the S.W. to (45 M.) *Lanark* (Lanark Inn, $ 2), a popular resort on the *Gulf of Mexico*, and (50 M.) *Carrabelle* (City Hotel, $ 2), a port with fishing and lumber interests. — From Carrabelle steamers ply to (30 M.) **Apalachicola** (*Fuller*, $ 2; Brit. vice-consul, *Mr. T. F. Porter*), another fishing and lumbering port, with (1905) 3244 inhab., at the mouth of the *Apalachicola River*.

About 2 M. beyond Tallahassee the *Murat Homestead* (see above) is visible to the right. We cross the *Ocklockonee River*. Magnolias grow here in great profusion. 189 M. *Quincy*, with tobacco-plantations.

At (208 M.) *River Junction*, on the *Apalachicola River* (see above; curious railway-station, erected on trestle-work above the river), we join the *Louisville & Nashville R. R.* Connection is also made here with the Apalachicola River steamers. Our train crosses a long trestle over the Apalachicola, formed by the junction of the *Flint* and *Chattahoochee*, 2 M. above. — 234 M. *Marianna*, on the *Chipola*. 290 M. *De Funiak Springs* (Griffin Ho., $ 2). Beyond (319 M.) *Crestview* we cross *Shoal River*. 349 M. *Milton* lies at the head of *Blackwater Bay*. About 10 M. farther on we cross *Escambia Bay* by a trestle 3 M. long. Fine marine views to the left.

369 M. **Pensacola** (*Escambia*, *Merchants'*, from $ 2½; Brit. vice-consul, *Mr. Charles A. S. Perceval*; Ger. con., *Mr. G. Rolfs*), on the bay of the same name, 10 M. from the Gulf of Mexico, was founded by the Spaniards in 1696 and has (1905) 21, 505 inhab., a brisk trade in fish and timber, and a huge grain elevator. The ruins of *Forts St. Michael* and *St. Bernard* date partly from the Spanish period.


A
West End on Lake Pontchartrain
B
Spanish Fort on Lake Pontchartrain
eridian
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Walk
City Park
Cypress Grove Cemet.
Metairie Cemet.
Greenwood Cemet.
Oakland Driving Park
Firemen's Cem.
Charity Hosp.
St. Patrick C.
Anthony
Bernadotte St.
Last St.
Quirce
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North Line St.
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NEW ORLEANS
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0 200 400 600 800 1000 Metres
MISSISSIPPI RIVER
Algiers
Gouldsboro
Gretna
Houston Shreveport
Galveston
Chalmette
Jackson
Baton Rouge
N.Orl.&So.R.R.D.
Old Lake Sta.
N.Orl.&N.E.R.R.Dep.
U.S. Br.Mint
Archbish.Res.
Fr.Market
Cathol.St. Louis
St.Louis Cem.
Fr.Op.Ho.
Jackson Sq.
Terminal R.R.
Court Ho.
West End Sta.
Sugar Exch.
Cust. Ho.
Cott.Exch.
Orpheum
Prod.Exch.
Louisv.&Nashv.R.R. Dep.
City Hall
St.Patr.Ch.
Lafayette Sq.
P.O.
1st Presb.Ch.
Oddfell.H.
How.d Libr.
Lee Circle
Tex.&Pac.R.R.D.
Coliseum Place
Annunciat.Sq.
Levee
Jackson Ave. Ferry
Richard St. Ferry
Tex.&Pac. R.R. Ferry
N.Orl.F.Jacks.&R.R.D.
Canal St.
Esplanade
Decatur
Chartres
Royal
Bourbon
Dauphine
Burgundy
Rampart
Claude
Elysian Fields
Market
Joseph St.
Howard Ave.
Poeybarre Street
Gaienne St.
Erato St.
Robin
Race
Orange
Richard
Market St.
St. James
Celeste
Adele St.
Teche
Opelousas
Homer
Newton
Verret
Lamarque
Socrates
Ptolemy
Lawrence
Bringier
Magellan
Columbus
Shepard
Americus
Copernicus
Perry
Gallatin
Herschel
Virgil
N
S
2 3 4 5 6 7
F G H

Visits may be made (small steamer) to the *Navy Yard*, *Ft. McRae*, *Ft. Barancas*, and *Ft. Pickens (Santa Rosa Island)*. Steamers also ply to European ports.

From Pensacola to Muscogee, 26 M., *Pensacola*, *Alabama*, & *Tennessee R. R.* in 1½ hr. — From *Muscogee* this line is being extended to *Mobile Bay*, which it will traverse on trestles to *Mobile* (p. 573).

The train now runs to the N., along the *Escambia River*, and enters *Alabama* (p. 572) shortly before reaching (412 M.) *Flomaton*. From Flomaton to (473 M.) *Mobile* and —

614 M. *New Orleans*, see R. 91 a.

109. New Orleans.

Railway Stations. *Union* (Pl. E, 4), for the Southern Pacific R. R., the Illinois Central R. R., and the Yazoo & Mississippi Valley R. R.; *Terminal* (Pl. E, 3), for the St. Louis & San Francisco R. R.; *Louisville & Nashville* (Pl. F, 4); *New Orleans & North Eastern* (*Queen & Crescent Station*; Pl. G, H, 3); *New Orleans & Southern* (Pl. G, 2); *Texas & Pacific* (Pl. F, 5), on the Levee, with ferries across the river; *Fort Jackson* (Pl. G, 3), on the W. bank; *West End* (Pl. F, 3, 4); *Old Lake* (Pl. G, 2, 3), for local lines to Lake Pontchartrain (p. 636).

Hotels. New Denechaud (Pl. b; E, 4), at the corner of Perdido and Baronne Sts.; *Grunewald (Pl. d; F, 4), University Place, near Canal St., R. from $ 2; St. Charles (Pl. c; F, 4), St. Charles St., from $ 3½, R. from $ 1½; Monteleone (Pl. f; F, 3, 4), corner of Royal and Iberville Sts., Cosmopolitan (Pl. e; F, 4), Bourbon and Royal Sts., these two good commercial houses, R. $ 1½; Fabacher's, Iberville St., near Royal St., plain, R. from $ 1. — Boarding Houses abound throughout New Orleans, and the numerous *Pensions* and *Chambres Garnies* of the French Quarter are carried on in genuine Creole style. During the Carnival (p. 633) a special bureau is established for giving information about lodgings.

Restaurants. In the above hotels; **Antoine*, 713 St. Louis St., excellent French cuisine, high charges; **Louisiana* (same owner), 717 Iberville St., simpler and less expensive; **Begué*, near the French Market, corner Madison and Decatur Sts., with famous noon-breakfast (unpretending in equipment); *Victor*, 209 Bourbon St.; *Figalle*, 722 Iberville St., unpretending, good cooking; *Fabacher*, 137 Royal St. (ladies' entrance, 708 Iberville St.), open day and night; *Dour*, at City Park; *Christian Women's Exchange*, corner Camp and South Sts., on Lafayette Square, clean and cheap. Restaurants at *West End*, see p. 636. — The markets of New Orleans are singularly well stocked with game, fish, fruit, and vegetables, and its restaurants have a good reputation. Among the Creole dishes for which New Orleans is famous is *Gumbo*, a thick vegetable soup, made of okra and flavoured with chicken, oysters, crabs, or shrimps. — *Cafés* abound in the French Quarter.

Electric Tramways traverse the city in all directions and run to the suburbs (fare 5 c.). All cars start from the loop on Canal Street, near the Post Office (Pl. F, 4). The rear-seats of each car are 'Reserved for our Colored Patrons'. Comp. p. 636. — **Carriages** about $ 1 per hour; from the railway-stations to the hotels 50 c. each person. — **Omnibuses** meet the principal trains (25 c.). — **Ferries** ply to *Algiers*, *Gouldsborough*, and *Gretna*, on the opposite side of the Mississippi. — **Steamers** ply to all points on the *Mississippi* (comp. R. 69), *Ohio*, and *Missouri*, and to *New York*, *Boston*, *Key West*, *Havana*, *Vera Cruz*, *Liverpool*, *Hamburg*, *South Africa*, and many other American and European ports. An Excursion Steamer starts every afternoon for a trip round the harbour and up the river (ca. 8 M.; fare 50 c.)

Places of Amusement. *French Opera House* (Pl. F, 3), corner of Bourbon and Toulouse Sts. (2000 seats); *Tulane*, *Crescent*, cor. of Theatre Arcade

(Baronne St.) and Common St. (Pl. F, 4); *Shubert*, Baronne St., between Lafayette and Poydras Sts. (Pl. E, 4; vaudeville); *Orpheum* (Pl. F, 4), 432 St. Charles St. (vaudeville); *Elysium Theatre* (Pl. G, 2); *Athletic Park* (Pl. B, C, 2), for summer vaudeville; *West End Casino*, at the lake (p. 636), for concerts in summer. — Comp. p. 636.

Consuls. British (for Louisiana, Arkansas, Mississippi, Alabama, and Florida), *Henry Thomas Carew-Hunt*, 141 Carondelet St. German, *Freiherr von Meysenbug*.

Tourist Agents. *Thos. Cook & Son*, 219 St. Charles St.

Post Office (Pl. F, 4), Lafayette Sq., open 6.30 a.m. to 7 p.m., Sun. 9-12.

New Orleans, the chief city of Louisiana, the twelfth city of the United States, and the largest to the S. of St. Louis, is situated on the *Mississippi*, 106 M. above its mouth in the Gulf of Mexico. The great bulk of the city lies on the left bank of the river, which is here $^1/_4$-$^1/_2$ M. wide and makes the bend from which New Orleans derives its appellation of 'Crescent City'. A great part of the city is below the level of the river during the high flood tides, which last for a few days each year, and is protected by a levee or embankment, 15 ft. wide and 14 ft. high. The municipal limits, which extend on the N. to *Lake Pontchartrain* (p. 636), enclose an area of 187 sq. M., but while three-fourths of this is as yet uninhabitable swamp, portions are steadily being reclaimed. The city is laid out with considerable regularity, and many of the chief streets are wide and shaded with trees. The most important business-thoroughfare is *Canal Street* (Pl. B-F, 1-4), which runs at right angles to the river and divides the *French Quarter*, or '*Vieux Carré*' (see p. 633), on the N.E., from the *New City*, or *American Quarter*, on the S.W. The finest residences are in *St. Charles Avenue* (Pl. A-E, 5, 6), and in *Esplanade Avenue* (Pl. D-G, 1-3), where the wealthy Creoles have their homes. In 1900 New Orleans contained 287,104 inhab., of whom about one-quarter are Coloured, while the remaining three-fourths include large proportions of French, German, Irish, Italian, and Spanish blood.

New Orleans was founded in 1718 by Jean-Baptiste Lemoine de Bienville, governor of the settlement made in 1699 at Biloxi (see p. 574), and became the capital of Louisiana in 1721, while still but little more than a village of trappers and gold-hunters (comp. *Miss Grace King's* 'Sieur de Bienville'). In 1732 the population was about 5000. In 1762 it was ceded by France to Spain, but the inhabitants rebelled against this transference, established a government of their own, and were not suppressed till 1769. From 1800 to 1803 New Orleans was again in the hands of the French, but in the latter year it was ceded, with the rest of Louisiana, to the United States. In 1804, when it had about 10,000 inhab., it received its city-charter. In 1815 the British were defeated here in an important battle by Gen. Andrew Jackson (see p. 636). In 1840 New Orleans was the fourth city of the United States, ranking after New York, Philadelphia, and Baltimore. New Orleans surrendered to the Unionists under Gen. Ben. Butler in 1862, after Adm. Farragut had succeeded in passing the forts at the mouth of the Mississippi and had the city under the guns of his fleet. By 1850 the population had increased to 116,375, by 1860 to 168,675, by 1870 to 191,418 by 1880 to 216,090, and by 1890 to 242,039.

New Orleans, as the outlet of the greatest agricultural valley in the world, with a grand natural harbour, furnished with important wharves and warehouses, and the largest Federal dry-dock, is essentially a com-

mercial city, and its foreign export trade is very important. In 1907 the value of its exports was $ 155,457,119 and that of its imports $ 46,069,502, the combined total showing it to be the third port of the United States (after New York and Boston). It is one of the largest cotton-markets in the world, and handles about 2-2½ million bales annually. It also exports large quantities of sugar, molasses, rice, pork, Indian corn, wool, timber, hides, and tobacco, and imports fruits from Central and South America, including enormous quantities of bananas. The tonnage of ships annually entering the harbour exceeds 4,500,000. Its manufactures (valued in 1905 at $ 84,600,000, in 175 varieties) include cotton-seed oil, machinery, barrel-staves, flour, rice, tobacco, and sugar. — In spite of the levees and embankments the lower Mississippi sometimes breaks its bounds, and disastrous inundations follow. Within the last 150 years the E. bank of the river at New Orleans has greatly advanced, the new land or 'batture' being at some points as much as 1500 ft. wide.

New Orleans is in many ways one of the most picturesque and interesting cities in America, owing to the survival of the buildings, manners, and customs of its original French and Spanish inhabitants. It has been described by *Mr. G. W. Cable* as 'a city of villas and cottages, of umbrageous gardens, intersected by 470 M. of unpaved streets, shaded by forest trees, haunted by song-birds, fragrant with a wealth of flowers that never fails a day in the year, and abundant, in season, with fruit — the fig, the plum, the pomegranate, the orange'. The *French Quarter*, to the N.E. of Canal St., is largely inhabited by *Creoles*, 'a handsome, graceful, and intelligent race, of a decidedly Gallic type, whose name does not necessarily imply, any more than it excludes, a departure from a pure double line of Latin descent' *(Cable)*. Of late years many negroes and Italians have crowded into this quarter. Among its foreign-looking features are the walls of adobé, the lime-washed stucco façades, the jalousies, the gratings, the small-paned windows, the portes-cochères, the arcades of elegant slim pillars, the balconies of delicate hand-wrought iron, the tiled roofs, and the inner courts with half-hidden gardens — the whole embosomed in bright-flowering semi-tropical plants. Most of the streets bear French or Spanish names; and indeed the whole street-nomenclature of New Orleans is picturesque, though the Anglicized pronunciation will sometimes puzzle a stranger. — The famous *Carnival of Mardi Gras* (Shrove Tuesday), celebrated here with great splendour since its beginning early in the 19th century, is, perhaps, the most picturesque festival in America. The city is taken formal possession of by Rex, the King of the Carnival; and the revels of his retinue, the Knights of Momus, the Mystic Krewe of Comus, and other societies are of the liveliest description. The processions are very elaborate (comp. p. 412). Those who mean to visit New Orleans at this season should secure rooms in advance (see p. 631).

The visitor to New Orleans should be familiar with *George W. Cable's* romances ('Sieur George', 'Mme. Delphine', 'The Grandissimes', etc.). The house of 'Sieur George' is at the S.E. corner of Royal and St. Peter Sts. (Pl. F, 3). No. 253 Royal St., the home of 'Mme. Delicieuse', and 'Mme. Delphine's', at 294 Barracks St. (Pl. F, 3), near Royal St., are replaced by new structures. The 'Haunted House' of 'Mme. Lalaurie' still stands intact at 1140 Royal St., at the S.E. corner of Hospital St. This mansion has harboured Lafayette, Ney, and Louis Philippe. Lafitte's shop, when he was no longer a pirate, is unchanged, at the N.E. corner of Bourbon and St. Philippe Sts. 'Tite Poulette' lived on the S. side of Dumaine St., between Royal and Chartres Sts. At 1122 Royal St. is a court surrounded by portalés of the early Spanish barracks. At the N.E. corner of St. Louis and Chartres Sts. is the grand mansion designed to give shelter to Napoleon Bonaparte, when Girod planned the escape from St. Helena. — See also New Orleans: the Place and the People', by *Grace King*.

Paul Morphy (1837-84), the famous chess-player, was a native of New Orleans and is buried in the old St. Louis Cemetery (p. 635). *General Beauregard* (1818-93; p. 569) was born in a house in Chartres St., between Ursulines Ave. and Hospital St. (Pl. F, G, 3).

The tourist will do well to begin his exploration of New Orleans by taking his bearings from the roof of the *Maison Blanche* (Pl. F, 3), the tallest office building in the city, at the corner of Canal and Dauphine Sts., or of the *Hennen Building*, at the corner of Common Ave. and Carondelet St. (Pl. F, 4), or from the roof of the **Custom House** (Pl. F, 4). The latter is a large granite building in Canal Street, near the river, containing the large *Marble Hall.*

Just below the Custom House, Canal St. ends at the ***Levee** (Pl. F-H, 3-6), which extends along the W. bank of the Mississippi for about 6 M. and presents a very animated and interesting scene. Following it to the left (N.) we soon reach *Jackson Square (Pl. F, 3), the old *Place d'Armes*, which retains its ancient iron railing, and contains a *Statue of Gen. Andrew Jackson* (see p. 632) by Mills. It is adjoined by the **Cathedral of St. Louis**, a good specimen of the Spanish-Creole style, built in 1792-94, on the site of the first church in Louisiana, but altered in 1850. It contains some paintings and interesting tombs. The buildings to the right and left are *Court Houses*, that to the S. having been built for the *Cabildo*, or City Council of the Spanish régime. In it and in front of it were held the ceremonies attending the cession of Louisiana by the French Government to the United States in 1803 (p. 632). On the N. and S. sides of the square stand the original *Pontalba Mansions*, of historic brick and still owned by that family.

In Orleans St., near the E. end of the Cathedral, is a Convent of Coloured Nuns, which contains what was formerly the famous *Quadroon Ballroom*, mentioned by Cable, the scene of many celebrated festivities.

On the Levee, just beyond Jackson Sq., is the ***French Market** (Pl. G, 3), a morning visit to which (best about 6 or 7 a.m.; on Sun. 8 or 9 a.m.) reveals a scene of the greatest picturesqueness and animation. — A little farther on, at the foot of Esplanade Ave., is the *U. S. Branch Mint* (Pl. G, 3), a large building in the Ionic style. In Royal St., four blocks from Canal St., is the new *Court House* (Pl. F, 3), a handsome structure of white marble and terracotta.

We may now take an opportunity for a stroll in the fine ***French Quarter** (see p. 633), among the chief promenades of which are *Esplanade Ave.* (Pl. D-G, 1-3), *Rampart Street* (Pl. F, 2, 3), and *Bourbon*, *Toulouse*, *Conti*, and *Royal Streets* (Pl. F, 3). At the corner of Chartres and Hospital Sts. is the *Archbishop's Residence* (Pl. F, G, 3), in the unchanged *Ursuline Convent*, built in 1730, in which a Colonial Museum has been opened recently (visitors admitted). Beyond this, on the Levee facing the river, is the second house of the Ursulines, also worth a visit.

Following St. Charles Ave. from Canal St. to the S., we pass the *St. Charles Hotel* (right) and the *Orpheum* (left; Pl. F, 4) and reach ***Lafayette Square** (Pl. F, 4), around which are grouped the *City Hall*, the new *Post Office*, *St. Patrick's Church* (Camp St.), the *First Presbyterian Church*, and the *Odd Fellows' Hall.* In the square are a *Statue of Franklin*, by Hiram Powers, a *Monument to John McDonough* (p. 635; 1898), and a *Statue of Henry Clay* (p. 582). Farther on we come to Lee Circle (Pl. F, 5), with a monument to *Gen. Robert E. Lee.*

At the corner of Camp St. and Howard Ave., adjoining Lee Circle, stands the ***Howard Library** (Pl. F, 4; open 9-9, Sun. 1.30-5; for reference use only), the last work of *H. H. Richardson*, who was a native of Louisiana. Adjacent are *Memorial Hall*, a museum of Confederate relics (entr. in Camp St.), and the new building of the *Public Library*. To the S.W., in Carondelet St., is the Jewish *Temple Sinai* (Pl. E, 5). — The *Monument to Margaret Haughery* (Pl. F, 5), the 'Orphan's Friend', is said to have been the first statue of a woman erected in the United States (comp., however, p. 314).

Tulane Avenue (Pl. C, D, 2, 3), named in honour of the chief benefactor of Tulane University (see below), and its continuation Common Street (Pl. E, 3, 4) contain the *Law Department* of Tulane University, the *House of Detention*, the Jesuit *Church of the Immaculate Conception* (Pl. E, F, 4), in a singular Moorish style, the *Parish Prison and Criminal Courts*, the *Hôtel-Dieu*, and the large *Charity Hospital* (Pl. E, 3), originally established in 1784 (1050 beds). The large **Cotton Exchange** (Pl. F, 4) is at the corner of Carondelet and Gravier Sts.; the *Produce Exchange* (Pl. F, 4) is in Magazine St.; and the *Sugar Exchange* (Pl. F, 4) is at the foot of Bienville St. — The *U. S. Marine Hospital* (Pl. A, 7) lies near the river.

*St. Charles Avenue (Pl. A-E, 5, 6), extending in a crescent from Lee Circle (p. 634) past Audubon Park (see below) to the river, is lined with oaks and magnolias and contains many old and admirable private residences, as well as many modern ones in more questionable taste. Among its public buildings are *Christ Church* (Pl. D, 6), the *New Orleans University* (600 students), the *Academy of the Sacred Heart*, the *Jewish Orphan Home*, and the *Harmony Club*. At the point where the avenue crosses Audubon Park are the newer buildings of the **Tulane University of Louisiana** (Pl. A, 5), an important and well-equipped institution with 1870 students and a library of 50,000 volumes. A department of Tulane University is the *H. Sophie Newcomb Memorial College for Women* (Pl. E, 6), founded in 1886. — A legacy of *John McDonough* (d. 1850) has built and equipped 30 handsome *School Houses* in different parts of the city, accommodating 15-20,000 children.

The **City Park** (Pl. B, C, 1), on the Metairie Ridge, is 150 acres in extent. The **Audubon Park** (Pl. A, B, 4-7), in which the Great Exhibition of 1884-85 was held, and which now holds the 'Sugar Experimental Station' (Pl. A, 7) of the State of Lousiana, is a long segment extending back from the river, being the ground in which the sugar-cane was first grown in this state. Both parks contain fine live-oaks. — The ***Cemeteries** of New Orleans are among its recognized sights, owing to the fact that the swampy nature of the soil prevents the digging of graves and requires the bodies to be interred in mounds above ground. The most interesting is the old *St. Louis Cemetery* (Pl. F, 3) which contains the earliest tombs, mostly French

and Spanish. The *Metairie Cemetery* (Pl. A, 1) is the handsomest, but is comparatively modern. It contains the grave of *Gen. Albert Sydney Johnston* (1803-62), with an equestrian statue. In the adjacent *Greenwood Cemetery* (Pl. B, 1) is a *Monument to the Confederate Dead*. The *Cemetery of St. Roch* (Pl. G, 1), in the French Quarter, has a famous shrine where many miracles are said to have been performed.

The two following trips by electric car give a good general survey of the town: — a. Canal Belt Line. This follows the long and dreary Canal Street (Pl. B-F, 1-4), passing the above-mentioned *Cemeteries;* skirts the *City Park* (p. 635), with its noble trees; crosses the *Bayou St. John* (Pl. D, 1), with its memories of Cable's 'Posson Jone'; passes the *Fair Grounds* (Pl. D, E, 1) and *Race Track*; and returns viâ *Esplanade Avenue* (Pl. D-G, 1-3) to Canal St. Before regaining our starting-point, however, we may transfer (free) at the corner of Esplanade Ave. and Rampart Sts. (Pl. F. 2), and take the Dauphine St. car through the business-quarter, then by the slums behind the *Ursuline Convent* (p. 634) and past *Holy Cross College*, to the terminus near the pleasant *U. S. Barracks*, whence we may walk along the Levee to *Chalmette* (see below). — b. St. Charles Avenue Belt Line. This leads from Canal St. viâ *Baronne St.* to *St. Charles Avenue* (p. 635), follows this street to *Audubon Park* (p. 635), passes *Tulane University* (p. 365), and returns viâ *Carrollton Avenue* (Pl. A, B, 4-2) and *Tulane Avenue* (p. 635(to Canal St.

Excursions. Among the favourite resorts of the New Orleaners is *Lake Pontchartrain, which lies about 5 M. to the N. of the city and is 40 M. long and 25 M. wide. A fish or game dinner at one of the garden restaurants here is a regular feature of a visit to New Orleans. *Spanish Fort Park*, at the mouth of the *Bayou St. John*, marks the site of a fort erected by the Spaniards to guard this approach to the city. It is reached by a drive along the Shell Road. *West End* (West End Hotel; Tranchina and other restaurants), also reached by the Shell Road or by electric car (cor. of Canal and Bourbon Sts.; Pl. F 3), is a favourite boating and yachting resort, with the *Southern Yacht Club House*, and many restaurants, a band-stand, a pavilion, and a garden along the lake. *Milneburg*, to the E. of Spanish Fort, is reached by railway from *Old Lake Station* (p. 631), or from the Louisville & Nashville Station (p. 631). — The site of the Battlefield of New Orleans (see p. 632) is at *Chalmette*, on the Mississippi, about 5 M. to the E. of Canal St., and may be reached by carriage or electric car (comp. above). Before reaching the battlefield we pass several old-time Creole mansions. The site of the battle is marked by an unfinished monument, but nothing marks the graves of the American and British soldiers. The *National Cemetery*, hard by, contains 12,000 graves of Union soldiers of the Civil War. — The *Carrollton Gardens* lie to the N. of the city (electric car). — A visit to one of the *Sugar Plantations* on the Mississippi will be found interesting; the most notable are the Ames, McCall, and Kernochan Plantations. — Good wild-fowl shooting and fishing are obtained all round New Orleans.

Longer excursions may be made to *Bayou Teche* (p. 596), *Pass Christian* (p. 575), *Bay St. Louis* (p. 575), *Mobile* (p. 573), the *Eads Jetties* (p. 432), etc.

From New Orleans to *New York*, see RR. 91 a, 91 b; to *Pensacola* and *Jacksonville*, see R. 108; to *Mobile*, see pp. 575-573; to points in *Texas* and *California*, see RR. 95, 87, 110; to *Cincinnati*, see R. 92; to *St. Louis*, see R. 93; to *Louisville*, see R. 92, b, c; to *Chicago*, see R. 93.

110. From New Orleans to Dallas, Fort Worth, and El Paso.

Texas and Pacific Railway to (515 M.) *Dallas* in 21-22 hrs. (fare $ 15.30), to (547 M.) *Fort Worth* in 23 hrs. ($15.30), and to (1160 M.) *El Paso* in 47 hrs. ($ 29.90). — Passengers by this route connect at Forth Worth with through-carriages for Los Angeles and San Francisco, following the tracks of the Southern Pacific Railway (R. 87) beyond El Paso.

New Orleans, see p. 631. The line at first ascends on the right bank of the *Mississippi*, finally parting company with the river near (85 M.) *Plaquemine*. From (89 M.) *Baton Rouge Junction* a short line runs to (8 M.) *Port Allen*, opposite *Baton Rouge* (p. 587). From (162 M.) *Bunkie* a line runs to (27 M.) *Simmesport*. From (169 M.) *Cheneyville* a line runs to the S. to *Lafayette* (p. 596), on the S. Pacific Railway. — 194 M. *Alexandria* (Rapides, $ 2-2½) is a pleasant little town of 5648 inhab., on the *Red River*. Steamers ply hence to Shreveport (see below).

324 M. *Shreveport Junction*, for (2 M.) **Shreveport** (*The Inn*, R. from $ 1; *New Phoenix*, *Caddo*, from $ 2½), a busy city with 16,013 inhab., on the Red River. Its chief exports are cotton and live-stock. Steamers ply regularly to Alexandria and New Orleans. Shreveport is the junction of lines to *Vicksburg* (p. 587) and *Houston* (p. 594). — Our line now bends to the left (W.) and enters *Texas* (p. 552) between (341 M.) *Greenwood* and (347 M.) *Waskom*.

368 M. **Marshall** (400 ft.; *Genocchio*, *Capitol*, $ 2-2½), a brisk little city with 7855 inhab., machine-shops, and other factories, is the junction of a line to (67 M.) *Texarkana* (p. 590), connecting there with the Iron Mountain Line (R. 94). — 390 M. *Longview* (335 ft.; Mobberly, Magnolia, $ 2) is the junction of the International and Great Northern Railway to Austin (p. 594), San Antonio (p. 592), and Laredo (p. 594). — 437 M. *Mineola* (400 ft.).

515 M. **Dallas** (465 ft.; *Oriental*, $ 2½-5; *Southland*, R. from $ 1½; *Imperial*, R. from $ 1; *Lakeside*, at Oak Cliff), a city of (1900) 42,638 inhab., lies on the *Trinity River*, in the centre of a rich corn, wheat, and cotton producing district. It is a railway-centre of great importance, lines branching off to all points of the compass; and the annual value of its trade is $ 50,000,000, of its manufactures about $ 12,000,000. The *Court House*, *City Hall*, *Federal Building*, and *Public Library* are large edifices. In 1897 a *Confederate Monument* was erected here, consisting of a shaft of Texas granite 50 ft. high, with statues of Jefferson Davis, Stonewall Jackson, Robert Lee, and Sydney Johnson at its base. On the bluffs (200 ft.) to the S. of Dallas is the suburban town of *Oak Cliff*, with a large Female University.

547 M. **Fort Worth** (640 ft.; *Worth*, from $ 3; *Delaware*, *Metropolitan*, R. $ 1), a city with (1900) 26,688 inhab., on the Trinity River, is the chief railway-centre of Texas, including lines to *Wichita* (p. 476) and *Newton* (p. 476), *Austin* (p. 594), *San Antonio*

(p. 592), and *Houston* (p. 594). This is the headquarters of the stock-men of the N. part of Texas and has large stockyards, grain elevators, flour-mills, packing-houses, foundries, railroad shops, and facories. The annual value of its trade is about $45,000,000. It has a *Utniversity* (845 students), a *Carnegie Library*, and other notable buildings. The electric street-railway system includes a line to Dallas. To the W. are *Arlington Heights* (180 ft.), with a Country Club, a winter-resort commanding a splendid view of Trinity Valley.

Beyond Fort Worth the line traverses an interminable cattle-raising district. Stations unimportant. 578 M. *Weatherford* (865 ft.). 662 M. *Cisco* (1610 ft.) is the junction of the Houston and Central Texas R. R. 708 M. *Abilene;* 749 M. *Sweet Water* (also a station on the Kansas City, Mexico, & Orient Railway); 814 M. *Big Springs.*

To the N. of this part of the line extends the **Llano Estacado** or **Great Staked Plain**, a district of 50,000 sq. M., consisting of a vast elevated plateau nearly 5000 ft. above the sea, surrounded by an escarpment of erosion resembling palisades. On the N. it is bounded by the *Canadian River* and on the W. by the *Pecos.* The name is said to be due to the stakes driven into it by the Spaniards to mark their way. The soil is generally a brown loam, covered with grama grass *(Bouteloua digostachya)* and low mesquite shrubs, but there are also large tracts of sand. There is no other vegetation. The surface is almost perfectly level, except where a slight variation is afforded by the sand-hills. There is no surface-water, except in a few scattered ponds, but numerous wells have been sunk, and the Staked Plain has thus now become a vast cattle-pasturage. The geological conditions are interesting to the scientific visitor.

Beyond (874 M.) *Odessa* we see the *White Sand Hills* to the right 947 M. *Pecos City*, on the *Pecos River*, is the junction of the Pecos Valley R. R. to (163 M.) *Roswell*, (352 M.) *Canyon City*, and (370 M.) *Amarillo.*

Canyon City lies at the E. end of *Palo Duro Canyon*, part of which, including many natural features of great interest, has been reserved for a national park.

Much important irrigation work has been effected in the Pecos Valley

From (966 M.) *Toyah* stages run to *Fort Davis* and *Fort Stockton* We now enter a mountainous district, with the *Guadalupe Mts.* to the right and the *Apache Mts.* to the left.

Between (1044 M.) *Altamore* and (1054 M.) *Eagle Flight* the *Carrizo Mts.* may be seen to the right. From (1067 M.) *Sierra Blanca* to —

1160 M. **El Paso**, see p. 591.

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VI. MEXICO.

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The Republic of Mexico, occupying the S. part of N. America, consists of a confederation of 27 States, three Territories, and a Federal District (in which is situated the city of Mexico). Its total area is about 767,000 sq. M. and its population in 1900 was 13,605,919. About 80 per cent of the inhabitants are of pure or mixed Indian blood, and only 20 per cent belong to the Spanish and other Caucasian races. With the exception of the flat and narrow strips along the coasts of the Gulf of Mexico and the Pacific Ocean, the country consists of a huge table-land bounded on each side by mountain-ranges, forming the N. prolongation of the Andes. The main range, bounding the W. side of the table-land, is named the *Sierra Madre*. The *Central Mexican Plateau* has a mean elevation of about 6000 ft.

Approaches. Plan and Season of Tour. Since the opening of the railways described in RR. 111-113, an excursion into Mexico can be easily added to a visit to the S. part of the United States, and affords a survey of so novel and picturesque a civilization as amply to repay the time and trouble. Three weeks will suffice for the journey to and from the City of Mexico, with halts at many interesting places on the way, and also for trips from the City of Mexico to Orizaba (or even Vera Cruz), Puebla, and Oaxaca (Mitla). This excursion involves no serious hardships and is constantly made by ladies; but those who wish to visit the interesting remains of Yucatan and Chiapas must be prepared to give more time and labour. The Mexican plateau may be visited at any season, and is, perhaps, at its pleasantest from June to Sept., when the dust is abated by the summer-rains. For a general tour, however, winter or early spring is preferable; and March or April will be found as good months as any. Fairly

light clothing is desirable for the heat of the day, but wraps should be at hand for the cool evenings and mornings. The rarefied air of the Mexican plateau is sometimes found rather trying at first. Those who intend to use the steamer (comp. pp. 647, 657) in one direction are advised to take it in going rather than in returning. An excellent through-train (60 hrs.) now runs between St. Louis (p. 410) and the City of Mexico.

Travellers who do not speak Spanish cannot do better than join one of the *Raymond and Whitcomb Parties* (see p. xxii), which visit Mexico in winter and spring. Their usual route is from Eagle Pass to the City of Mexico (R. 112), and thence back to El Paso (R. 113), with excursions to Orizaba (R. 115), Tampico (p. 647), etc. The parties travel on a special vestibuled train, which serves them as their hotel (except in the City of Mexico) and has the additional advantage of reaching and leaving the stopping-places at convenient hours. Interpreters accompany each party. — Similar excursions are arranged by the *American Tourist Association* and other Tourist Agencies (comp. p. xxii), while the chief Mexican Railway Companies also organize parties of the same kind.

Railways, etc. English is generally understood at the railway ticket-offices of the larger towns and by the conductors of the through-trains. Time-tables and 'folders' are also issued in English. The visitor to the parts of Mexico described below will scarcely come into contact with the system of *Diligences*. Most of the cities have complete systems of *Tramways* (generally drawn by mules), all with first-class and second-class cars. The tramways sometimes connect places 10-70 M. apart.

Hotels. Mexican hotels are apt to be poor, and their sanitary arrangements leave much to be desired. The ordinary charges are \$ 2-2½ per day (higher in the City of Mexico). The place of chambermaids is usually taken by 'Mozos', or boys. Small fees are expected and efficacious. Neither soap nor matches are provided in the bedrooms. Wine and foreign beer are dear, native beer and pulque (p. 649) cheap.

Passports. Custom House. Passports are not necessary in Mexico, but may sometimes prove convenient. The custom-house examination is generally conducted courteously and leniently, and scarcely concerns things likely to be in the possession of the ordinary tourist. Articles purchased in Mexico are often liable to duty at the American frontier, where the traveller is also exposed to the inquisition of quarantine and immigration officials. A detention of several days may result from an incautious visit to any district affected by yellow fever.

Money. Expenses. The nominal unit of the Mexican monetary system is the *Peso* (dollar), divided into 100 *Centavos* (cents), though the 50-centavo piece (half-dollar) is now relatively more common. The new law establishes the following coins: Gold, 10 and 5 peso pieces; Silver, 50, 20, and 10 c.; Nickel, 5 c.; Copper, 2 and 1 c. Banknotes of 5, 10, 20, 50, 100, and 1000 pesos are issued by several banks, but the Government offices accept only those of the *Banco Nacional* and the *Banco de Londres*. The old expressions *Medio* (6½ c.) and *Real* (pl. *Reales*; 12½ c.) are still in constant use, though the coins they represent no longer circulate (*dos reales* = 25 c., *cuatro reales* = 50 c., *seis reales* = 75 c., *ocho reales* = \$ 1). — The cost of a short tour in Mexico should not exceed \$ 8-10 a day. A Mexican dollar is worth about 50 c. American gold. Mexican money may be bought cheaply in New York, and it is advisable to obtain a good supply of it before entering Mexico. A fair rate of exchange can, however, be obtained in the City of Mexico. American money may also be exchanged at the frontier. Drafts on New York banks are a good form in which to carry large sums, and realize the highest rate of exchange in the City of Mexico.

Language. A slight acquaintance with Spanish will be found of great service in travelling in Mexico. Vowels have the pronunciation of Continental Europe; consonants are pronounced as in English, with the following exceptions: c before e and i sounds like th in thin, before a, o, u, l, r, and at the end of a word = k; g before e and i = guttural h; h is silent; ll = ly; j = ch in loch; z = th in then. It should be noted that Mexican pronunciation is not quite identical with that of Spain. The transliterations in these pages do not claim to be more than approximately accurate.

Postal Arrangements. A list of the insufficiently addressed letters received by each mail is usually exhibited at the post-office, and in applying for one of these it is necessary to show a visiting card or some similar identification. Letters addressed to the large hotels in the City of Mexico are delivered at the hotel-office. The postal rates for domestic letters and for those to the U. S. A. or Canada is 5c. per ½ oz., for letters to other countries of the Postal Union 10 c. per ½ oz. Letters from the U. S. to Mexico are sent at the U. S. domestic rate (2 c. per oz.).

Bull Fights are still fairly common in Mexico. Persons of delicate sensibilities should, however, avoid these degrading and disgusting spectacles.

Bibliography. Mexican guidebooks are published by Scribner's Sons, Reau Campbell, and Hoeck (p. 651); the folders and pamphlets issued by the railway companies are also often useful. The traveller should be familiar with *Prescott's* 'Conquest of Mexico'. Other works include those by *David A. Wells, A. H. Noll, Lumholtz, Mrs. Alec Tweedie, Flandrau, Starr, Edwards, Hans Gadow*, and *C. F. Lummis;* 'Mexico of the Twentieth Century', by *Percy F. Martin* (1908); 'Mexico and her People of To-day', by *Nevin O. Winter* (1907); and 'Mexico, its Social Evolution', a monumental work edited by *Justus Sierra* (trans. by *G. Sentiñon;* 1906). *Gen. Lew Wallace's* 'The Fair God' and *H. Rider Haggard's* 'Moctezuma's Daughter' are stories of Mexican life. For the antiquities, see 'Report of an Archæological Tour in Mexico in 1881', by *A. F. A. Bandelier.* — About 160 sheets of the *General Map of the Government Topographical Survey* (1:100,000) have been issued. The *Carta de Ferrocarriles de los Estados Unidos Mexicanos* (1:2,000,000) is an official railway map.

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111. From Laredo to the City of Mexico.

837 M. (802 M. by the direct line; see p. 643) National Railroad of Mexico *(Ferrocarril Nacional de México)* in 33½ hrs. (fare $ 38.78, Mexican currency; sleeper $ 9, Mexican currency).

This line affords the shortest and most direct route to the City of Mexico (from New Orleans 1525 M. by the direct line, from St. Louis 1878 M.) and passes through fine scenery. Baggage from the United States should be 'checked' to New Laredo, where the Mexican custom-house examination takes place and luggage is re-checked. — Travellers should be prepared for a good deal of annoyance from dust.

Laredo, see p. 594. The train crosses the *Río Grande del Norte* into Mexico and halts at (1 M.) *Nuevo Laredo* or *New Laredo* (370 ft.; see above; U. S. Con., A. B. Garrett), a place of 6548 inhabitants. The first part of the journey lies through a dreary plain of cactus and mezquite. To the right, beyond (70 M.) *Lampazos* (1150 ft.; Rail. Restaurant), rises the *Mesa de los Catujanos* (1500-2000 ft.). — 109 M. *Villaldama.*

167 M. **Monterrey** or *Monterey* (1790 ft.; *Barón, Iturbide*, $ 3-4½; U. S. Con. Gen. *Philip C. Hanna;* Brit. Vice-Con. and Ger. Con.), the capital of the *State of Nuevo León*, a city of (1900) 62,266 inhab., situated in a beautiful valley, between the *Cerro de la Silla* (4150 ft.) on the E. and the *Cerro de la Mitra* (3620 ft.) on the W., is frequented as a winter-resort. It is the most important manufacturing city of N. Mexico, containing large foundries, steel-works, and breweries. The picturesque *Episcopal Palace*, now government property, was built in 1782. The *Topochico Hot Springs* (Hotel, $ 2½), which lie

3 M. to the N.W., are reached by street-car (return-fare, incl. bath, 50 c.) or by the branch-railway to (72 M.) *Reata*, also a station on the line from Diaz to Durango (p. 644). At Monterrey we cross the railway from Torreón to Tampico (see p. 646).

Beyond Monterrey the train ascends through the narrow valley of the *San Juan*, amid grand mountain-scenery (to the right, the *Sierra de la Paila;* to the left, the *Sierra Madre*, p. 639). Just short of (174 M.) *Santa Catarina* a remarkable circular opening through the mountain is seen to the left, at an elevation of 3000 ft. At (187 M.) *Garcia* are some interesting caves. — 233 M. **Saltillo** (5250 ft.; *Hotel de la Plaza, Coahuila*, $ 3-5; U. S. Con., *T. W. Voetter;* Brit. Vice-Con.), the capital of *Coahuila*, with (1900) 23.996 inhab., was formerly famous for its manufacture of *zarapes* (Mexican blankets), now, apparently, a lost art. Branch-lines run hence to the W. to (190 M.) *Torreón* (see p. 646), to the N. to (44 M.) *Paredón* (p. 646), and to the S. to (78 M.) *Concepción del Oro*, the centre of a rich copper-mining district. — Beyond Saltillo we cross the battlefield of *Buena Vista* (Feb. 23rd, 1847). At (257 M.) *Carneros* (6500 ft.) we reach the top of the central plateau of Mexico (p. 639). The line descends a little and runs in a straight direction across a level plain. — 353 M. *Vanegas* (Rail. Restaurant) is the junction of a branch-line to (14 M.) *Cedral* and (28 M.) *Matehuala* (Hotel Angelina), a small town of (1900) 15,060 inhabitants. — 367 M. *Catorce* (5940 ft.) is the station for the rich silver-mining town of the same name (6 M. to the E.). A little farther on we cross the Tropic of Cancer and enter the Torrid Zone (monument to the right; 6130 ft.).

475 M. **San Luis Potosi** (6158 ft.; *Sanz, Progreso*, $ 3; *Rail. Restaurant*, meals $ 1; U. S. Con., *G. A. Bucklin;* Ger. Con., *G. Unna*), capital of the state of the same name, a city of (1900) 61.019 inhab., owes its importance to the rich silver-mines in its vicinity. Among the chief points of interest are the *Cathedral* (with a clock given by Philip II. of Spain), the *Mint*, the *Alameda* (with statue of Hidalgo, see below), the *Plaza Mayor*, the *Markets*, the *Governor's Palace*, the *City Hall*, the *Palace of Justice*, and several *Churches*. The *San Pedro Mine* should be visited.

Railways run hence to *Tampico* (p. 647), on the Gulf of Mexico, and to *Aguascalientes* (p. 647).

From (557 M.) *Rincón* a branch-line runs past (31 M.) *San Luis de la Paz*, a small mining-town with 9747 inhab., to (37 M.) *Pozos*. — 560 M. *Dolores Hidalgo* is named in honour of the patriot Hidalgo (p. 645), who was curé of this parish. — 583 M. *San Miguel de Allende* (5955 ft.; Progreso, San Miguel, R. from 50 c.), a city of 12,740 inhab., at the base of the *Cerro de Montezuma*, contains the only Gothic church in Mexico (early 19th cent.; by an untrained native architect) and excellent public baths. It was the birthplace of the patriot Allende (p. 645), for whom it is named. — At (606 M.) *González Junction* (*Empalme González;* Rail. Restaurant) the line

divides. The through-carriages proceed by the E. and shorter branch (main standard-gauge), which runs viâ (634 M.) *Querétaro* (also a station on the Mexican Central Railway, see p. 649); *Huichapán* (701 M.), picturesquely situated in a beautiful valley, with a fine church; *Nopala* (713 M.); *Huehuetoca* (771 M.); and *Tacuba* (798 M.) to (802 M.) the **City of Mexico** (*Colonia Station;* see p. 650).

The longer but somewhat more interesting W. branch (narrow-gauge) follows the valley of the *Laya* (views to the right). Farther on the vegetation becomes more tropical. — 618 M. *Celaya* (5770 ft.; Central, Guadalupe, Gomez), a city of 25,565 inhab., at the intersection of the Mexican National and Mexican Central railways (comp. p. 649), is a place of some importance, with fine old churches (*Our Lady of Carmen*, etc.) and good baths. *Dulces* (sweetmeats; 15-50 c. per box), strawberries, and opals (frequently 'faked') are offered for sale at the station. — 642 M. *Salvatierra* (De la Luz), with (1900) 11,008 inhab. and many churches conspicuous by the glazed tiling of their domes. — 660 M. *Acámbaro* (6085 ft.; Rail. Hotel & Restaurant), with 8006 inhab.

From Acambaro to Uruapan, 143 M., railway in 9 hrs. — 57 M. *Morelia* (several hotels), with 38,606 inhab., the capital of the state of *Michoacán*. — 95 M. *Pátzcuaro* (6985 ft.; several hotels), with 7210 inhab., situated on the beautiful lake of that name. On the E. bank of the lake stand the remains of the old city of *Tzintzúntzan* (launch from Pátzcuaro in 3 hrs.), once the capital of the Tarasco Indians, the former occupants of Michoacán. The old church contains an Entombment ascribed to Titian and said to have been presented by Philip II. of Spain. — 143 M. *Uruapán* (5285 ft.; Oriente), with 9860 inhab. and extensive coffee-plantations. About 6 M. to the E. is the fine **Fall of Tzarácuacua* or *Cedozo*, in a wooded ravine (two leaps of 100 ft. each). — The railway is to be prolonged to the Pacific Ocean.

Our line now turns to the S.E. (left) and ascends through the valley of the *Lerma* (p. 648; views to the left). 698 M. *Maravatio* (6610 ft.; several hotels) is the junction of a line to (53 M.) *Zitácuaro*. — 721 M. *Tepetongo* (7650 ft.); 736 M. *Tultenango*, near the rich gold-mining district of *El Oro;* 751 M. *Flor de María* (8500 ft.; Rail. Restaurant, meals $ 1). We threa da tunnel and enter the *Valley of Toluca*.

792 M. **Toluca** (8744 ft.; *León de Oro*, R. from 75 c.; *Andueza*, $ 2½-3½, with electric light and a restaurant; *Gran Sociedad*, R. from 75 c.; *Gran Restaurant Monte Carlo*, well spoken of), the capital of the *State of Mexico*, is a prosperous and clean-looking city of (1900) 25,940 inhab., splendidly situated in a fertile valley, among lofty mountains, at a height of 8650 ft. above the sea. Its attractions include the *State Buildings*, fine *Markets*, interesting *Churches*, and quaint *Portales;* while linen 'drawn-work', pottery, and other souvenirs may be purchased.

Toluca is the junction of lines to (10 M.) *San Juan de las Huertas* and to (19 M.) *Atla*, viâ (15½ M.) *Tenango*.

The ascent of the *Nevado de Toluca or *Xinantecatl* (14,980 ft.), a snow-clad volcanic mountain rising to the S., may be accomplished in one long day (there and back). The view is superb.

The run from Toluca to Mexico reveals some of the finest scenery in Mexico. The train runs towards the E. and beyond the Indian town of *Ocoyoacac*, seen far below us to the right, begins to ascend the *La Cruz Mts.* (Sierra Madre; views to the right). We follow the windings of the *Río Lerma* (p. 643). To the right towers the *Nevado de Toluca* (p. 643). 805 M. *Jajalpa* ('Hahalpa'; 8870 ft.). Much maguey (p. 649) is cultivated in this district. 811 M. *Salazar.* At (812 M.) *La Cima* (9835 ft.) we reach the summit and begin the descent, obtaining magnificent **Views of the *Valley of Mexico*, with its lakes, the City of Mexico in the centre, and the grand snow-clad volcanoes of Popocatepetl (r.) and Ixtaccihuatl (l.; p. 654) in the background. At (820 M.) *Dos Ríos* we cross the *Río Hondo* by a lofty trestle. Numerous lateral ravines *(barrancas)* are also crossed. Farther on, Chapultepec (p. 654) is conspicuous to the right. 831 M. *Naucalpán.* Beyond (834 M.) *Tacuba* the tree of the Noche Triste (p. 654) is seen to the left.

837 M. **City of Mexico** *(Colonia Station)*, see p. 650.

112. From Eagle Pass to the City of Mexico.

1090 M. Mexican International Railroad *(Ferrocarril Internacional Mexicano)* in 42½ hrs. (fare $ 51.81, sleeper $ 9, Mex. currency; from Spofford Junction $ 32.30, New Orleans $ 52.70, New York $ 85.20, U. S. currency). Baggage is examined and re-checked at Ciudad Porfirio Diaz.

Eagle Pass, a small town of 3000 inhab., lies on the N. or American bank of the *Rio Grande del Norte* (see p. 591). The train crosses the river by an iron bridge, 310 yds. long, and halts at *Ciudad Porfirio Diaz*, formerly called *Piedras Negras* (720 ft.; Hotels; U.S. Con., Luther T. Ellsworth), a Mexican city of (1900) 13,468 inhab., in the *State of Coahuila.* Picturesque Mexican figures, the men in *sombreros* and *zarapes*, the women in gaily coloured *rebozos*, appear at once. — The train ascends steadily towards the great Mexican table-land (p. 639), traversing at first an arid and monotonous desert. Few houses are seen except an occasional *rancho*, of stone or adobé, and little vegetation except yuccas, mezquite, and cacti. 25 M. *Nava* (1065 ft.); 32 M. *Allende* (1230 ft.); 51 M. *Peyotes* (1595 ft.); 72½ M. *Sabinas* (1115 ft.; Hotel del Ferrocarril), in a coal-producing district, the junction of lines to *Hondo* and *Rosita;* 82 M. *Soledad* (1215 ft.); 98 M. *Aura* (1485 ft.); 123 M. *Hermanas* (1300 ft.); 148 M. *Monclova* (1925 ft.; Rail. Hotel and Restaurant; 14,580 inhab.), the junction of a line to (42 M.) *Cuatro Ciénegas;* 159 M. *Castaño* (2455 ft.); 181 M. *Bajan* (2765 ft.). From (212 M.) *Reata* (2950 ft.) a branch-line runs to (72 M.) *Monterrey*, on the Mexican National R. R. (see p. 641). — 223 M. *Treviño* (2920 ft.; Robles).

At (254½ M.) *Jaral* (3750 ft.; Rail. Restaurant), where we may be said to have fairly reached the great Mexican plateau, the line turns to the right (W.) and now runs at nearly the same level. — 297 M.

Paila (3900 ft.); 334½ M. *Bola* (3575 ft.), at the S. end of the large *Laguna de Parras;* 350 M. *Hornos* (3595 ft.), the junction for (14 M.) *San Pedro* (several hotels; 8997 inhab.); 369 M. *Matamoros* (3650 ft.; U. S. Consul, C. E. Miller), the junction of a branch-line to (43½ M.) *Tlahualilo.*

At (383 M.) *Torreón* (3720 ft.; p. 646) we join the *Mexican Central Railway.* — To the (1090 M.) **City of Mexico,** see R. 113.

The Mexican International Railroad goes on to (540 M. from Eagle Pass) Durango (6562 ft.; 31,092 inhab. in 1900; several hotels; U. S. Con. and Ger. Vice-Con.), the capital of the state of its own name, at the foot of the ferriferous *Cerro de Mercado.* — A railway runs hence to the N.W. to (37 M.) *Canatlán,* (103 M.) *Santiago Papasquiaro,* and (135 M.) *Tepehuanes.*

113. From El Paso to the City of Mexico.

1224 M. Mexican Central Railway *(Ferrocarril Central Mexicano)* in 51 hrs. (fare $ 60.41 Mex. currency; sleeper $ 9; return-tickets, valid for 9 months, to City of Mexico, from St. Louis $ 76.15, from Kansas City $ 69.95, from New Orleans $ 63.75, all U. S. currency). Side-trip tickets are issued, to holders of through-tickets to California, from El Paso to Mexico and back to Eagle Pass viâ R. 112, or vice versâ, $ 40). This line is the direct route between the City of Mexico and California and the West (comp. RR. 87, 95). Baggage is re-checked and examined at Ciudad Juarez (comp. p. 644). — The dust on this line is also troublesome (comp. p. 641).

El Paso, see p. 591. The train crosses the *Río Grande* to (¾ M.) *Ciudad Juárez* ('Wahrez'), formerly *El Paso del Norte* (3800 ft.; Rail. Restaurant; U. S. Con. and Ger. Vice-Con.), with the Mexican custom-house, an interesting old church, and a statue of Juarez (p. 653).

A railway runs hence to the S.W. to (149 M.) *Casas Grandes* and (155 M.) *Terrazas.*

Our route at first lies through the *State of Chihuahua* ('Chee-wah-wah') and offers little of interest. 30 M. *Samalayuca* (4300 ft.); 95 M. *Ojo Caliente* (4090 ft.); 112 M. *Moctezuma* (Rail. Restaurant); 139 M. *Gallego* (5450 ft.); 194 M. *Sauz* (5170 ft.). We cross the *Chubiscar* to —

225 M. **Chihuahua** (4635 ft.; *Palacio, Robinson,* R. from $ 1½; *Ahumada,* R. from $ 2; tramway; U. S. Con., *L. A. Martin*; Brit. and Ger. Vice-Con.), the capital of the state of that name, a busy city with (1900) 30,098 inhab., in a hill-girt plain. It was founded in 1539. The chief object of interest is the fine **Parroquia,* or parish-church, dating from 1711-89. Behind the *Banco Minero Chihuahuense* is a monument marking the spot where *Miguel Hidalgo* and *Ignacio Allende,* leaders of the revolution of 1810, were executed in 1811. The patriots were previously imprisoned in the *Casa de Moneda* (Mint). The *Plaza* and *Alamedas* are pleasant, and the old *Aqueduct* is interesting.

A day's excursion may be made to the *Santa Eulalia Silver Mines,* which are said to produce an average of 20,000 tons of ore monthly. Railway to (15 M.) *Santa Eulalia* in 1 hr. — Chihuahua is also a station on the Kansas City, Mexico, & Orient Railway, which will ultimately connect Kansas City with the Pacific Coast of Mexico. At present the W.

extension of this railway runs from Chihuahua, past (51 M.) *San Andrés*, (82 M.) *San Antonio*, and (122 M.) *Miñaca*, to (195 M.) *Sanchez*. From this point the line is being prolonged, for 274 M. more, to *Topolobampo*.

Beyond Chihuahua the line descends. We cross the *Río Santa Cruz* at (279 M.) *Ortíz*, and the *Río Nonoava* near (326 M.) *Santa Rosalía* (4020 ft.; 8909 inhab.), with hot springs. — 371 M. *Jiménez* ('Heemenez'; 4530 ft.; Rail. Restaurant) is a city of 9322 inhab. on the *Florida*, the junction of a railway to (55 M.) *Parral*, a town of 16,382 inhab., the centre of a rich mining-region, (67 M.) *Adrián*, and (96 M.) *Rosario*. The dust on this part of the route is very trying. From (417 M.) *Escalón* the Mexican Northern Railway runs to (78 M.) the great silver-mining district of *Sierra Mojada*. — Near (437 M.) *Ceballos* (3900 ft.) we enter the *State of Durango*. We now traverse the *Mapimi Basin*, in which cotton, sugar, maize, and wheat are produced, and cross the *Río Nazas*.

517 M. **Torreón** (3720 ft.; *Hotel Salvador*, well equipped; *Sternau*, with restaurant, good but rather expensive; *Francia*, well spoken of; *Rail. Restaurant;* U. S. Consular Agent and Ger. Vice-Con.), a thriving city of ca. 25,000 inhab., with a brisk trade and considerable industry, is the junction of the Mexican International Railroad (R. 112). An electric railway runs hence to (3 M.) *Lerdo* (3725 ft.), a cotton-trading place of 17,795 inhabitants.

From Torreón to Monterrey and Tampico, 551 M., *Central Railway* in 36¾ hrs. (spending the night at Monterrey; fare $ 36.44). — 42 M. *San Pedro* (p. 645); 141 M. *Hipólito;* 181 M. *Paredón*, junction of a line to Saltillo (p. 642); 229 M. *Monterrey* (p. 641); 262 M. *San Juan;* 320 M. *Linares* (pop. 7076); 405 M. *Victoria* (Español), capital of the state of *Tamaulipas*, with (1900) 10,086 inhab.; 490 M. *González*. — 551 M. Tampico, see p. 647.

From Torreón to Saltillo, 190 M., *Ferrocarril Coahuila y Pacífico* in 14½ hrs. (fare $ 9.39). — 35 M. *Hornos;* 90 M. *Parras* (Rail. Restaurant; pop. 6476); 148 M. *General Cepeda*. — 190 M. Saltillo, see p. 642.

The country traversed beyond Torreón is arid and sterile, and sand-spouts are frequently seen. The mountains become higher, one near (562 M.) *Jimulco* reaching a height of 10,280 ft. Numerous large haciendas are passed. The train ascends steadily towards the top of the great central plateau of Mexico (p. 639). 615 M. *Symon* (5145 ft.). At (643 M.) *Camacho* (5400 ft.; Rail. Restaurant) we enter the *State of Zacatecas*. 680 M. *Pacheco;* 700 M. *La Colorada* (6000 ft.); 750 M. *Fresnillo* (6860 ft.). Beyond (768 M.) *Calera* (7050 ft.) we begin to ascend rapidly and the scenery becomes very picturesque.

785 M. **Zacatecas** (8045 ft.; *Colón*, *Francés*, $ 2½-4), a city of (1900) 32,856 inhab., romantically situated in a narrow ravine, offers several points of interest to the stranger. It is still one of the centres of the silver-mining of Mexico, though its produce has of late fallen off. The *Market Place*, in the centre of the city (reached from the railway-station by tramway), presents a very picturesque appearance, with its large fountain, whence the water-carriers fetch their supplies for the city's use. Near by is the *Cathedral* (1612-1752), with an

elaborately carved *Façade. The *Municipal Palace* (with its attractive courtyard) and the *Mint* are also within easy reach.

A visit may be paid to one of the *Silver Reduction Works*, in which the processes of reducing the ore are carried on after a highly primitive fashion, but a visit to a silver-mine is more conveniently managed at Guanajuato (p. 648). — A splendid *View is obtained from the *Bufa*, a mass of porphyry rising 500 ft. above the city and crowned with a small chapel, originally dating from 1728 but rebuilt in 1794. On March 2nd, 1871, the Revolutionary troops were defeated here by the Juarez forces after a sanguinary struggle.

Zacatecas is connected with (6 M.) Guadalupe by a tramway, down which the cars descend by gravity in 1/2 hr., while they are drawn up again by mules in 1-1 1/4 hr. At Guadalupe is the fine **Church of Nuestra Señora de Guadalupe* (1721), with an elaborately decorated interior and a few fair paintings. The Chapel of the Purisima is especially gorgeous. The old convent adjacent contains a *College* and *Orphan Asylum*. — Good pottery may be bought at Zacatecas and Guadalupe.

On leaving Zacatecas the train again descends rapidly (seats to the left), affording striking *Views of the Oriental-looking city and the mountains. Numerous mines and smelting works are seen on both sides. The engineering difficulties overcome by the railway both in reaching and leaving Zacatecas are remarkable. 824 M. *Soledad.* Several lofty peaks are seen in the distance to the left.

860 M. **Aguascalientes** (6180 ft.; *Bellina*, American, $ 4 1/2-8; *Washington*, Mexican. $ 3-6; *Rail. Restaurant;* U. S. Con., *W. D. Shaughnessy*), a pretty little city with (1900) 37,816 inhab. and a large silver and copper smelter, is the capital of the small state of the same name and is widely known for its hot springs and for its 'drawn work'.

The pretty *Alameda* leads to the E. from the station (tramway), which is itself 1 M. to the E. of the city (tramway), to the **Hot Springs** (ca. 95° Fahr.), each enclosed by a small bath-house (fee about 15 c.). The overflow from the springs is carried off by a small canal skirting the Alameda. The best baths, fed by a conduit from a reserved spring, are close to the railway-station (fee about 25 c.). — Some of the *Churches* of Aguascalientes are interesting, and the *Public Squares* are gay with luxuriant vegetation.

FROM AGUASCALIENTES TO SAN LUIS POTOSÍ AND TAMPICO, 415 M., railway in 19 1/4 hrs. (fare $ 20.47) This division of the Mexican Central Railway passes through some of the finest scenery in Mexico. — 68 M. *Salinas*, with large salt works. At (140 M.) **San Luis Potosí** (p. 642; Rail. Restaurant) we cross the Mexican National Railway. — We now descend gradually by a series of terraces, traversing the **San Ysidro* and other beautiful valleys. Beyond (257 M.) *Cardenas* (3800 ft.; Rail. Restaurant) the line drops abruptly into the *Canoas Valley* and then penetrates the fine **Tamasopo Canyon*, threading many tunnels. 298 M. *Rascon* (1000 ft.; Rail. Restaurant). Other fine canyons and waterfalls are passed farther on. From (340 M.) *Taninul* we may visit the interesting *Choy Cave*, over which the railway passes. — 415 M. **Tampico** (100 ft., *Hidalgo*, *Southern*, R. from $ 1; *Continental*, R. from $ 1 1/4; *Sol*, *Pancardo*, $ 2-3 1/2; U. S., Brit., and Ger. Con.), an old town of 16,313 inhab., on the *Pánuco*, 7 M. from its mouth in the Gulf of Mexico, has regular steamboat communication with New York ($ 50), New Orleans ($ 34.55), Mobile, Galveston ($ 25), Havana, Hamburg, and other ports. There is good tarpon fishing here. — The train goes on to (421 M.) *La Barra*.

Near (890 M.) *Encarnación* (6090 ft.) we cross the *Río Encarnación* and enter the *State of Jalisco*. 929 M. *Lagos* (6150 ft.; Plaza), with about 16,000 inhabitants. Beyond (946 M.) *Pedrito* we enter the fertile and silver-mining *State of Guanajuato* ('Wahnawahto').

966 M. **León** (5865 ft.; *Hotel de Diligencias*, $2\frac{1}{2}$), a city of (1900) 58,426 inhab., with manufactures of saddlery and other leathern goods and of rebozos (p. 644), contains a *Cathedral* and several pretty *Plazas*. Visitors will notice the fences of the *Organ Cactus*. — 986 M. **Silao** (5830 ft.; *Redon; Victoria; Rail. Restaurant*), a town of 15,463 inhab., with handsome churches and gardens.

From Silao a branch-railway runs through a canyon to (11 M.) *Marfil*, and along a narrow gorge to ($14\frac{1}{2}$ M.; fare 87 c.) **Guanajuato** (6835 ft.; *Unión*, $3; *American*, well spoken of; U. S. Con. Agent, Brit. and Ger. Vice-Con.), a highly interesting silver-mining city, founded in 1554. Pop. (1900) 40,580. The houses cluster in the bottom of the ravine or cling to its sides, while the fortress-like smelting-works add to the general picturesqueness. In 1905 Guanajuato was overwhelmed by a flood, which caused the loss of 500 lives and did enormous damage. Above the town rises a large square rock (view), forming a conspicuous landmark for many miles round. The chief source of interest in and near Guanajuato is the **Silver Mines**, including the rich *Veta Madre*, a vein 30-160 ft. in width, not yet exhausted, although it has been worked for a distance of 10 M. The mines are more easily visited than those in other parts of Mexico, being entered by stone stairways; and orders of admission may be obtained from the *Administrador*. The *Reduction Works* are also interesting; a few are worked by horse or mule power ('patio process'), with the primitive methods of 300 years ago. A visit may be paid to the large *Alhondigo de Granaditas*, dominating the city and now used as a prison. The *Teatro Juarez* is one of the handsomest theatres in America. Other points of interest are the churches, the *Catacombs* at the Panteón or Cemetery (with numerous mummified bodies), numerous handsome private residences, and the fine public and private gardens. The water-carriers bear curious long slender water-jars (almost peculiar to Guanajuato).

The district now traversed is fertile and diversified. At (1005 M.) *Irapuato* (5765 ft.; Pan-American; Guerrero), a town of 19,640 inhab., fine fresh strawberries are offered for sale every day in the year at the station (25-50 c. per basket).

From Irapuato to Guadalajara, 161 M., railway in $7\frac{1}{2}$ hrs. (fare $7.93). This line runs through the valley of the *Rio Lerma*, one of the most fertile districts in Mexico, and is to be continued to the Pacific coast. — From (78 M.) *Yurécuaro* a branch-line runs viâ (26 M.) *Zamora* (Colón), with 12,533 inhab. and numerous churches, to (87 M.) *Los Reyes*. — 95 M. *La Barca* (several hotels), near the E. end of Lake Chapala (see below). — From (112 M.) *Ocotlán*, the junction of a branch-line to (22 M.) *Atotonilco* (p. 658), a steamer plies thrice weekly across *Lake Chapala* (70 M. in length) to (3 hrs.) the prettily situated bathing-resort of *Chapala* (Hotels Arzapalo, La Palma, Huber). — From (136 M.) *Atequiza* stages run to (2 hrs.) Chapala (see above). — From (146 M.) *El Castillo* a tramway runs to (4 M.) the beautiful "Falls of Juanacatlán ('Wahnacatlan'), on the Lerma, 70 ft. high and 600 ft. wide (best seen from the terrace of the electric works on the left bank). Close by is a cotton-mill for 1000 operatives.

161 M. **Guadalajara** ('Wahdalahara'; 5055 ft.; *Garcia*, with baths, $3-6; *Cosmopolita*, $3; *Roma; Palacio;* U. S. and Ger. Con.; Brit. Vice-Con.), the capital of Jalisco (p. 647), is a rich and progressive place with 101,208 inhab. and manufactures of fine pottery, rebozos (p. 644), cotton, silk, etc. It is cleaner and more regularly laid out than most Mexican cities and contains many points of interest for the stranger. Near the centre of the city stands the Cathedral, a fine edifice completed in 1618, with a dome and two lofty towers. In the sacristy is an Assumption ascribed to Murillo. To the S. of this, abutting on the *Plaza de Armas* (band thrice weekly), is the *Sagrario* (1808-43). On the E. side of the same square is the *Governor's Palace*, while on the S. and W. are the *Portales de Cortazar* and *de Bolivar*, containing many of the best shops. — The *Church of San José* in the Plaza de Nuñez,

is a gorgeous modern edifice, elaborately adorned with gilding and painting and said to have cost $ 1,000,000. — On the N. side of the city is the interesting *Hospital de Belén*, and on the E. side, not far from the pretty *Alameda* (military music), is the huge **Hospicio de Pobres* (1000 inmates), with its beautiful flower-filled 'patios' and departments for men, women and children (incl. a Kindergarten and a crèche), the deaf and dumb, and the blind ('drawn work' and other articles for sale). On the opposite side of the town is the *Penitentiary*, on the radiating principle (visitors admitted). The **Paseo*, running to the S. from the Alameda, affords a fine walk or drive. — Other important buildings are the *Bishop's Palace*, the *Mint*, the *City Hall*, and the *Teatro Degollado*, one of the finest in Mexico. — *San Pedro* and other points in the suburbs are also interesting.

Beyond Guadalajara the line now goes on to (55 M.) *Ameca* (several hotels), a town of 4739 inhab., with sugar-refining and mining industries.

Another line runs to the S. from Guadalajara, viâ (84 M.) *Sayula* (7888 inhab.), (102 M.) *Zapotlán* (17,596 inhab.), and (119 M.) *Túxpan* (Brit. Vice-Con.) to (162 M.) *Colima* (20,698 inhab.; Francés, Jardín, Europa; Brit. Vice-Con. and Ger. Con.), the capital of the state of that name. Colima is connected by a narrow-gauge railway with (60 M.) the seaport of *Manzanillo* (U. S. Consul, A. T. Haeberle; Brit. Vice-Consul).

1017 M. *Salamanca* (Colón, Juarez; pop. 13,724) is famous for its gloves. Beyond (1043 M.) *Celaya* (see p. 643), we cross the Mexican National R. R. (R. 111), and beyond (1060 M.) *Mariscala* we enter the *State of Querétaro*.

1071 M. **Querétaro** (5950 ft.; *Internacional*, from $ 3, good; *Ferrocarril*, *Gran*, from $ 3; *Colón*, R. 75 c.; cab 50 c. per hr.), a picturesque city with (1900) 38,016 inhab., is pleasantly situated in a fertile valley. The domes and towers of numerous churches rise above the other buildings, the most interesting being the *Cathedral* and *Santa Clara*. It possesses an important woollen industry. Opals are found in great abundance in the neighbourhood.

Perhaps the chief interest of Querétaro is its connection with the last days of the unfortunate Emp. Maximilian, who was besieged here in 1867 by the Republican troops under Escobedo. The city surrendered on May 19th, and a month later Maximilian, with his adherents Miramon and Mejia, was shot on the *Cerro de las Campanas*, a hill to the W. of the town. The spot is now marked by a chapel and affords a fine *View of Querétaro, embowered in greenery. The *Capuchin Convent*, in which Maximilian was confined before his execution, is now a private house, but visitors are admitted to his room.

In leaving Querétaro the line passes under the fine **Aqueduct* constructed in 1726-38 by the Marquis de Villar del Aguila to provide the city with water. Some of the arches are nearly 100 ft. high. To the left, 2 M. from Querétaro, in a romantic ravine, is the large *Hercules Mill*, the largest cotton-mill in Mexico (1800 workmen).

On this part of the journey we see immense fields of the *Maguey* or *Century Plant (Agave Americana)*, cultivated by the Mexicans for the sake of its sap, which is converted into the national beverage *Pulque*. The plants are sometimes 10-12 ft. high. A spirituous liquor named *Mezcal* or *Tequila* is distilled from the roots of another variety of agave.

Beyond (1106 M.) *San Juan del Río* (6245 ft.; Rail. Restaurant; 8224 inhab.) the line ascends rapidly, passing the plain of (1124 M.) *Cazadero* and reaching its highest point (8135 ft.) just beyond (1148 M.) *Marqués*. The descent hence to Mexico is very fine. — 1174 M. *Tula* (6660 ft.; Moctezuma), a town of about 1700 inhab.

is believed to have been founded by the Toltecs and contains interesting remains ascribed to that people (guides at the hotels). A line runs hence to (45 M.) *Pachuca* (see p. 655) in 2 hrs. — Beyond (1185 M.) *El Salto*, where we join a branch of the Mexican National R. R., we skirt the *Tajo de Nochistongo* (right), a canal-cutting made by the Spaniards in 1607-8 to drain the lakes in the Valley of Mexico (comp. p. 652). It is 12½ M. long, 130-165 ft. deep, and 260-330 ft. wide. The majestic snow-capped peaks of *Ixtaccihuatl* and *Popocatepetl* (p. 654) come into view ahead of us. The line again ascends a little. 1195 M. *Huehuetoca* (7410 ft.).

1224 M. *City of Mexico*, see below.

114. The City of Mexico.

Railway Stations. *Mexican Central and Cuernavaca Pacific Station* (Pl. B, 1, 2), Calle de Mina; *Mexican Railway Station* (Pl. B. 1, 2; Vera Cruz), Calle de Mina; *Mexican National Station* (Pl. A, 3; 'Colonia Station'); *Interoceanic Station* (beyond Pl. G, 4); *Hidalgo & N.E. Railway Station* (comp. Pl. G, 1), Peralvillo, to the N.E.; *Xico and San Rafael Station* (Pl. G, 5; Apapasco), Calle Cuauhtemotzin. *City Railway Ticket Office*, cor. of Avenida del Cinco de Mayo and Calle de Vergara (Pl. E, 3).

Hotels (comp. p. 640). ITURBIDE (Pl. a; E, 3), Avenida de San Francisco, a large house enclosing a roomy central court, once the residence of the Emp. Iturbide (p. 652), R. from $ 3 (elevator), good; SANZ HOTEL, Calle de la Mariscala (Pl. D, 3), R. from $ 3, D. $ 2; ST. FRANCIS (Pl. f; C, 3), opposite the statue of Carlos IV. (p. 653), R. from $ 3; BAZAR (Pl. b; E, 3), Calle del Espíritu Santo 8, R. from $ 2½; PALACIO (Pl. e; E, 4), Puente del Espíritu Santo 10, R. from $ 3; SAN CARLOS (Pl. c; E, 3), Calle del Coliseo Nuevo, R. from $ 1½; GILLOW (Pl. d; E, 3), Calle de San José el Real, well spoken of, R. from $ 1½; REFORMA (Pl. g; B, 3), Paseo de la Reforma 129, pleasantly situated some way from the centre of the city, R. from $ 3; GUARDIOLA *(Kingman's)*, Puente de San Francisco 14 (Pl. E, 3), R. from $ 2½; PORTER'S, Calle San Juan de Letrán 12 (Pl. D, 3), R. from $ 3, well spoken of.

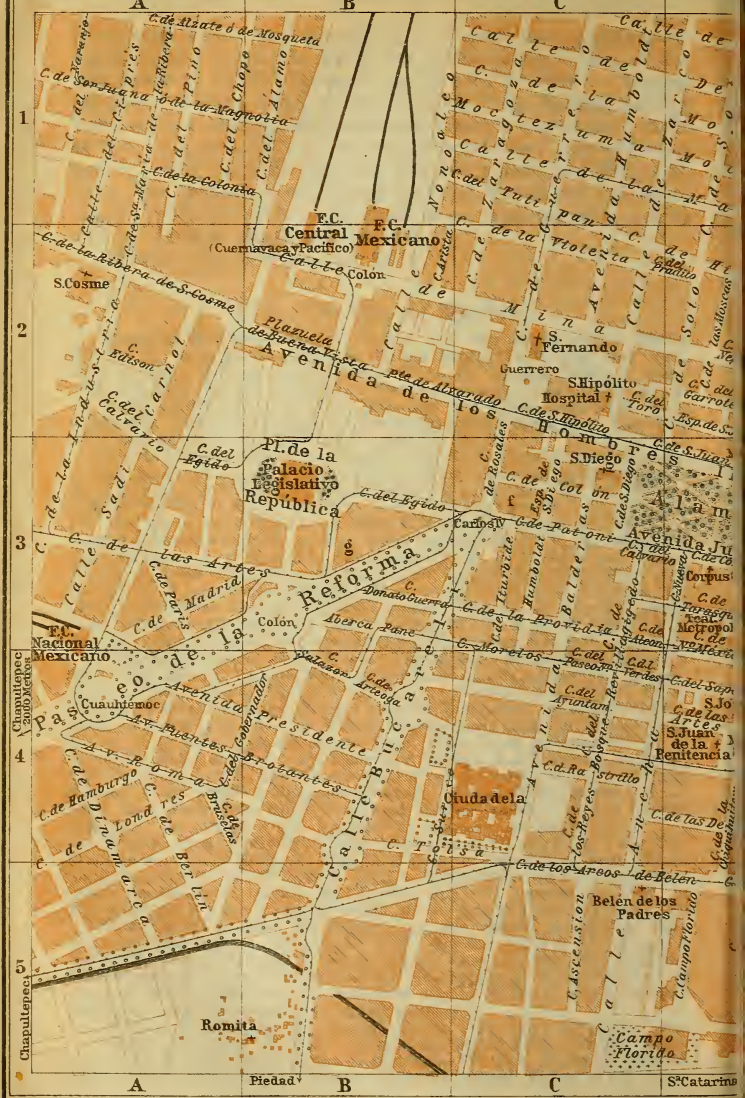
Restaurants at the above hotels; *Chapultepec*, Paseo de la Reforma ¾ M. from the city, fashionable, military music on Sun. afternoon; *Sylvain*, Avenida Diez y Seis de Septiembre (formerly Calle del Coliseo Viejo; Pl. E, 3, 4), good French cookery; *Porter's American Restaurant*, see above; *Café de Paris*, Avenida Diez y Seis de Septiembre (formerly Calle del Coliseo Viejo (Pl. E, 3, 4; fish); *Café Restaurant Colón*, Paseo de la Reforma (Pl. B, 3; much frequented on Sun.); *Café Imperial*, Avenida de San Francisco (Pl. D, 3); *Café Royal*, Avenida de San Francisco, these two recommended for breakfast; *Novelty*, below Gillow's Hotel (see above); *El Gran Salón (Adeath)*, *Salón Bach*, and *Gambrinus*, three frequented 'cantine' in the Avenida de San Francisco, the last two with restaurants; *Kingman*, see above.

Electric Street Railways intersect the city in all directions (fare 6 c.; to suburban points 10-25 c.). The chief point of intersection is the Plaza de la Constitución (Pl. F, 3, 4; p. 652). — **Observation Cars** ('Viajes Alrededor de México'), leaving the Zocalo, opp. the Palacio Nacional, at 9.30 a.m. and 3 p.m., make the round of the city and suburbs (fare $ 2).

Cabs *(Coches de Sitio)* are divided into two classes, denoted by blue and red flags; fares for 1-3 pers. $ 1 & 75 c. per hr. ($ 1½ & $ 1 on Sun. & holidays), 50 c., 40 c. per ½ hr. or fraction thereof. The fare from the railway-stations to the hotel, including hand-baggage, is about the same as the half-hourly rate. Double fares from 10 p.m. to 6 a.m and on certain holidays. The driver expects a small pourboire.

District Messengers *(Cargadores)*, 25-50 c. per errand, $ ¾-1 per hour.

Baths (Sitz baths 25-50 c.; Turkish or Russian baths, $ 1.25). *Baños San Felipe de Jesús*, in the street of that name (Pl. F, 4, 5); in the *Iturbid. Hotel* (see above); *Baños del Harem*, Calle del Coliseo Nuevo 11 (Pl. E, 3).


A
B
C
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F.C. Central Mexicano
(Cuernavaca y Pacífico)
F.C. Mexicano
F.C. Nacional Mexicano
Calle de Colon
Avenida de los Hombres
Pl. de la República
Palacio Legislativo
Reforma
Paseo de la
Paseo Presidente
Calle Buca
Av. Fuentes Brotantes
Av. Roma
Ciuda de la
Belén de los Padres
Romita
Campo Florido
S. Fernando
S. Hipólito
Hospital
S. Diego
S. Cosme
Chapultepec 2000 Metros
Piedad
S.ta Catarina
Wagner & Debes' Geogl Estabt Leipzig

MÉXICO
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Sª Ana
C. del Verro carril
C. del Pensamiento
C. Ramón Allende
Salitreros
C. del Carrizo
Sª María la Redonda
Pl. del Jardín
Pl. de la Lagunilla
Cerca de S. Lorenzo
Pl. del Concep.
Esc. de Artes
Circo Teatro Orrin
La Concepción
C. de Tenerías
C. de Estanco de Mujeres
C. de Estanco de Hombres
C. de los Parados
Sª Catarina Mártir
C. de la Amargura
C. de Celaya
Pl. del Carmen
El Carmen
C. del Apartado
Casa de Moneda
F.C. de Hidalgo y Nordeste
C. de Vazquez
C. de Tenexpa
C. del Tepozán
C. de Granaditas
C. de Tenochtitlan
C. de Tezcoco
C. de Tacuba
C. de Tacuba
Sª Domingo
Esc. de Medicina
C. de Cocheras
C. de Chicoacutla
C. del Pie del Cuerno
Pl. de S. Sebast.
S. Sebast.
Pl. de S. Sebast.
Teatro Renacim.
Cámara de Diputados
Corr. Dominicos
La Encarnación
La Enseñanza
Sª Catal. de Sena
S. Pedro y S. Pablo
Loreto
Pl. de Loreto
Sª Teresa la Nueva
Pl. de Mixcalco
Correos
Esc. de Ingen.
Sª Clara
Telégr.
Monte de Piedad
Catedral
Sagrario
Sª Teresa la Ant.
Sª Inés
La Santísima
Sª Francisco
Profesa
Teatro Principal
Trinidad
Pl. de la Constitución
Palacio Nacional
Museo
Esc. de Bellas Artes
Jesús María
Colº de Niñas
Banco de Cadena
Banco Nacional
Pal. Municipal
Mercado Volador
Conserv. de Música
S. Bernardo
Coliseo
Balvanera
Merced
Manzanares
Pl. de Palomares
Colorado
Vizcainas
Regina
Jesús del Venero
S. José de Gracia
S. Camilo
Pl. de la Paz
Sª Tomás la Palma
Salto del Agua
S. Jerónimo
S. Miguel
Pl. de S. Pablo
S. Pablo
Monserrate
Hosp. Juárez
Pl. del Arbol
Hosp. Militar
Merc. Rastro
S. Salvador el Seco
S. Salvador el Verde
S. Lucas
Tlaxcoaque
Canal de la Viga
F.C. Xico y S. Rafael

Places of Amusement. *Teatro Nacional* (Pl. D, 3), in construction; *Teatro Principal* (Pl. E, 3); *Teatro Arbeu* (Pl. E, 4; opera, drama, and comedy); *Teatro Colón*, Calle del Colegio de Niñas (Pl. E, 4); *Teatro Virginia Fábregas* (formerly Renacimiento; Pl. E, 3; Mexican performers). — *Orrin's Circus* (Pl. D, 2). — *Parque Luna*, near Chapultepec (p. 654). — *Frontón Nacional*, Calle Iturbide (Pl. C, 3), for the game of pelota. — *Bull Ring* (Plaza de Toros), Colonia de la Condesa; seat on the shady side ca. $ 3 (season, Oct.-Feb.). — Good **Concerts** in the *Conservatory of Music* (Pl. F, 4) and the *Teatro Metropolitano* (Pl. D, 3).

Shops (English spoken at most of the best). Mexican curiosities, photographs, guide-books, maps, English books, periodicals, & newspapers: *American Book & Printing Co. (Hoeck)*, Avenida de San Francisco; *Spaulding*, Calle de la Cadena 23 (Pl. E, 4); *Sonora News Co.*, Calle de Gante 4; *Mrs. John R. Davis* ('The Aztec'), Calle de Gante 8; *W. G. Wolz Co.*, Avenida de San Francisco. Other good shops are in the Avenida de San Francisco, the Calle del Coliseo Nuevo, and the Avenida del Cinco de Mayo. *Free Reading Room* (open 8-10) at Trinity Church, opposite the W. entrance of the Hotel Iturbide, with an excellent library and full supply of American papers. — 'The Mexican Herald' (morning) and 'The Daily Record' (evening), two daily papers in English (5 c.), contain many useful items for the tourist, including daily lists of letters lying at the G. P. O. for English and American visitors (comp. p. 641). The 'Anglo-American' is a weekly paper. 'Modern Mexico' is an illustrated monthly journal (25 c.).

Clubs. *American Club*, Avenida Diez y Seis de Septiembre 16; *British Club*, Avenida de S. Francisco 36 (Pl. E, 3); *Casino Español; Jockey Club*, Avenida de S. Francisco (Pl. E, 3); *Reforma Athletic Club* (tennis, cricket, and football); *Country Club*, at Churubusco, near Coyoacán (p. 654), with golf-links.

Streets. The streets of the city of Mexico were officially re-named in 1889, when the town was divided into four quarters by the long street called *Avenida Oriente* and *Av. Poniente*, running from E. to W., and by the *Calle Norte* and *Calle Sur*, running from N. to S. All streets running E. and W. were to be called *Avenidas* and those N. and S. *Calles*. As, however, the inhabitants absolutely refused to recognize this arrangement, the City Council, passed a resolution in 1907, reverting to the old system under which each street has an individual name.

Post Office (*Correos;* Pl. D, E, 3). — **Telegraph Office** (Pl. E, 3). — **Cablegrams**, Avenida del Cinco de Mayo 6 (Pl. E, 3).

British Envoy and Minister, *Hon. Reginald T. Tower*. Avenida de París 5; consul, *Mr. C. E. W. Stringer*, Avenida de San Francisco 8. — **U. S. Ambassador,** *Hon. D. E. Thompson*, Tercera de Versalles 49; Con.-Gen., *Mr. Arnold Shanklin*, Cuarta Calle de Balderas 59 (9-12 & 2-5). — **German Envoy and Minister,** *K. Bünz;* Con., *Dr. Rieloff*.

Protestant Churches. Services in English are held at Calle de Gante 5 (Meth. Epis.; 10.15 a.m. and 8 p.m.), *Christ Church*, Avenida de Nuevo México (formerly Calle de la Providencia, Pl. C, 3; Epis.; 11 a.m. and 8 p.m.), and *Union Church*, Quinta Calle Humboldt (11 a.m. and 8 p.m.).

Mexico (7434 ft.), the capital and by far the largest city of the Mexican Republic, lies in the centre of the Valley of Mexico, in part of the former bed of Lake Texcoco. It contains ca. 450,000 inhab., chiefly full-blooded Indians or mestizoes, and including over 5000 natives of the United States and Great Britain. The streets are generally wide and electrically lighted, but most of them are badly paved and not very clean. Most of the buildings are of stone, and several of the public edifices are very handsome. The public squares and gardens and the residential suburbs are very attractive. The climate is equable (50-70° Fahr.).

The Spanish city of Mexico was founded in 1522 on the site of the ancient Aztec *Tenochtitlan*, the population of which is placed by tradition

at from 300,000 to 500,000. Its growth has been steady and rapid. In 1600 it contained 15,000 inhab., in 1746 it had 90,000, and in 1800 it had about 120,000. The commerce of the city is mainly in transit. Its manufactures include cigars and cigarettes, gold and silver work, pottery, feather-work, saddlery, paper, religious pictures, hats, and beer. Numerous attempts have been made at various epochs to drain the valley of Mexico (comp. p. 650), but none of these proved successful until the completion in 1898 of the great *Drainage Canal* (comp. Map, p. 654), constructed at a cost of $ 10,000,000. It is 30 M. long and crosses the mountains by a tunnel 6 M. in length. Its width at the top varies from 45 ft. to 168 ft. The canal is crossed by numerous bridges of stone and iron.

The ***Cathedral** (*Church of the Asunción de María Santísima;* Pl. F, 3) stands on the N. side of the Plaza de la Constitución or Plaza de Armas, 5-10 min. walk from the Sanz and other chief hotels. This edifice, which occupies the site of the chief Aztec temple *(Teocalli)*, was begun in 1573 and finally dedicated in 1667. The towers, 218 ft. high, were not completed till 1791. It is 425 ft. long (from N. to S.), 200 ft. wide, and 180 ft. high. In style it is similar to the Spanish Renaissance edifices of the same period.

The **Interior**, which is in the Doric style with traces of Gothic, has an imposing effect in spite of its huge and incongruous modern altars and the wooden flooring. The fine *Dome* is adorned with paintings. The *Choir* occupies the centre of the church and has richly carved stalls. The aisles are adjoined by rows of chapels, the most interesting of which are the *Capilla San Felipe de Jesús*, with the tomb of the Emp. Iturbide (1790-1824), the *Cap. de las Reliquias*, with paintings of martyrs by Juan de Herrera, and the *Cap. San Pedro*. The *Sacristy* and the *Chapter House* also contain interesting paintings, including an alleged Murillo. The heads of Hidalgo, Allende, Jimenez, and Aldama (comp. p. 645) are interred below the *Altar de los Reyes*, in the apse. — The visitor should not fail to ascend one of the towers for the sake of the *View of the city (fee 25 c).

On the E. the Cathedral is adjoined by the **Sagrario Metropolitano* (Pl. F, 3), the first parish-church of the city, dating in its present form from 1749-69 and restored in 1858. It is in the florid style named after the Spanish architect Churriguera (close of 17th cent.). — In front of the Sagrario is the *Martinez Monument*, showing the geographical position of the city, the varying levels of Lake Texcoco, etc.

The centre of the Plaza de la Constitución (Pl. F, 3, 4) is occupied by the pretty Zocalo Garden, where a band generally plays in the evening. Almost all the electric lines start in this square.

On the E. side of the Plaza de la Constitución stands the huge **Palacio Nacional** (Pl. F, 3, 4), 675 ft. long, containing many of the governmental offices (interior open to visitors). The chief points of interest are the large *Hall of the Ambassadors* (with portraits of Mexican celebrities) and the *Senate Room*. — On the S. side of the Plaza are the *Palacio Municipal* (Pl. F, 4) or *Pal. del Ayuntamiento*, the *City Hall* (formerly called *La Diputación*), and the *Portal de las Flores* (shops). On the W. side are the *Portales Mercaderes*. — To the S.E. of the Plaza is the chief **Market* (*Mercado Volador;* Pl. F, 4) of the city.

Behind the Palacio Nacional and entered from the Calle de Moneda is the ***National Museum** (Pl. F, 3; open daily, exc. Sat., 10-1).

The most valuable and interesting collections are the ***Mexican Antiquities* (from Yucatan, etc.), including the famous *Aztec Sacrificial Stone* (so called), the so-called *Cross of Palenque*, the **Aztec Calendar*, and the image of *Huitzilopoxtli*. The *Historical Collections* are also of interest. See Descriptive Guide (Engl. trans. by *H. N. Branch*).

A little farther to the E., in the Calle de la Academia No. 208, is the ***Academy of San Carlos**, with the *Museum of Fine Arts* (Pl. G, 3, 4; open 9-12 and 1-5), containing good Italian and Flemish paintings and interesting collections of old and modern Mexican works (Las Casas protecting the Indians, by *Felix Parra*, etc.).

The Avenida de S. Francisco (formerly *Calle de Plateros* and *Calle de San Francisco;* Pl. E, F, 3), forming the principal business street of the city, leads to the W. from the Plaza de la Constitución to (½ M.) the ***Alameda** (Pl. C, D, 3), a public garden, with fine beeches and a great variety of flowering trees and shrubs (band and fashionable promenade on Sun. and Thurs.). — The Avenida del Cinco de Mayo (Pl. D, E, 3), running parallel with the Avenida de San Francisco on the N., is also a fine street. It ends on the W. at the Alameda.

A little to the S.E. of the Mexican Central and Cuernavaca Pacific Station (p. 650) and adjoining the *Guerrero Garden* (with monument) is the *Church of San Fernando* (Pl. C, 2), the interesting cemetery attached to which contains the graves of Juárez (fine monument), Miramon (p. 649), Mejia (p. 649), Zaragossa, Guerrero, Comonfort, and other eminent Mexicans.

Among the numerous other interesting buildings in the city, of which but a scanty selection can be named here, are the **Biblioteca Nacional** (Pl. E. 4; 600,000 vols.; open 10-5 and 6-9. Sun. 9-12), in the Calle de San Agustín, a little to the S.W. of the Plaza de la Constitución; the *Casa de Moneda* (Mint; Pl. F, G, 2), in the Calle de Apartado; the **Minería* or *Escuela de Ingenieros* (School of Mines; Pl. E, 3), in the Calle de San Andrés (29-51; enormous meteorites in the court and portico); the *House of Congress* (Cámara de Diputados; Pl. E, 3), in the former Teatro Iturbide, at the corner of the Calle Primera del Factor and the Calle de la Canoa (large new *Palacio Legislativo* being erected to the W.; Pl. B, 3); the *Technological Industrial Museum*, with samples of the crude products and manufactures of Mexico, in the Church of St. Andrew; the *Church of Santo Domingo* (Pl. F, 2), in the plaza of the same name, a little to the N. of the Cathedral; the *School of Medicine* (Pl. F, 2), opposite the last, occupied by the Inquisition for 250 years; the *Conservatory of Music* (Pl. F, 4), in the Calle de la Universidad; the huge *City Hospital* (Pl. C, 2); the *Prison;* the *Church of La Santísima* (Pl. G, 3), with its finely carved façade, ½ M. to the E. of the Cathedral; and numerous other churches and charitable institutions.

The fashionable drive of the Mexicans is the *Paseo de la Reforma (Pl. C-A, 3, 4), which begins near the Alameda and runs to the S.W. to (2 M.) Chapultepec (p. 654; band on Thurs. and Sun., 4-6). At the entrance is an equestrian statue of Charles IV. (Pl. C, 3); and the 'Glorietas', or circles (400 ft. in diameter), which occur at frequent intervals farther on, contain monuments to *Columbus*, *Guatemotzin* or *Guauhtémoc* (the last Indian Emperor), *Juárez*, *Friar Servando Teresa de Mier*, *Gen. Juan Zuazua*, etc. The Paseo commands fine views of Popocatepetl and Ixtaccihuatl (p. 654). At the end of it is a small park, with a collection of native animals.

Environs of Mexico.

The chief point of interest in the immediate neighbourhood of the City of Mexico is the *Palace of Chapultepec, finely situated on a rocky hill at the end of the Paseo de la Reforma (p. 653; also reached by the Tacubaya tramway from the Plaza de la Constitución, 10 c.). Orders of admission (free) may be obtained from the Governor of the Palacio Nacional (p. 652). The present building, which occupies the site of Montezuma's Palace, dates from 1783-85, with later additions. It is occupied by President Diaz and by the National Military School (320 cadets). The fine old cypresses in the grove surrounding the palace *(Cupressus disticha)* reach a height of 120 ft. and a girth of 30-40 ft. A monument commemorates the cadets who fell in the defence of the palace against the Americans in 1847. Beyond the hill is the battlefield of *Molino del Rey* (Sept. 8th, 1847). The *View from the ramparts includes the city and valley of Mexico, with Popocatapetl and Ixtaccihuatl in the background. — From Chapultepec the excursion may be extended (electric railway; 1¼ M.) to *Tacubaya* (37,050 inhab.), with the National Observatory, two churches, a secularized convent, and beautiful private *Gardens.

About 2¼ M. to the N. of the city (electric railway from the Plaza de la Constitución; 10 c.) is **Guadalupe** or *Hidalgo*, with the sanctuary of the Virgin of Guadalupe, the patron-saint of Mexico and more especially of the Indians. The Virgin is believed to have appeared to an Indian, Juan Diego, in 1531, on the adjoining hill of Tepeyac. At the foot of the hill is the large church of *Nuestra Señora de Guadalupe*, completed in 1709, containing a miraculous picture of the Virgin, imprinted on Diego's *tilma* (blanket). At the top of the hill is the *Capilla del Cerrito*, and close by is another chapel, covering a holy (chalybeate) spring. The singular monument on the hill was erected by a grateful seaman.

At *Popotla*, 2½ M. to the N.W. of the city (electric railway from the Plaza; 12 c.), is the famous *Arbol de la Noche Triste, or *Tree of the Dismal Night*, under which Cortes is said to have wept on the night of the expulsion of the Spaniards from Mexico (July 1st, 1520). It is a kind of cypress (see above). The road to it passes the *Tlaxpana Aqueduct*. The car goes on to *Tacuba* and (2½ M. farther) *Atzcapotzalco* (20 c.).

San Angel (*San Angel Inn*, $ 5-8; *Villa des Roses*, with good cuisine, from $ 5), S M. to the S.W. (electric car 20 c.), is worth visiting for its view of the snow-mountains and the valley of Mexico.

Electric railway excursions may also be made to the *Panteón de Dolores*, *Mixcoac*, *Coyoacán*, *La Piedad*, *Tialpam*, to the S.W. and S. of Mexico, and other points. — The villages of (2 M.) *Santa Anita* and (3 M.) *Ixtacalco*, on the *Viga Canal*, are also reached by electric car, but the so-called *Chinampas* or *Floating Gardens* near them have lost most of their interest. The canal ends at (8 M.) *Xochimilco*, whence a new aqueduct conveys water to the city.

The two magnificent snow-capped volcanoes of **Popocatepetl** (17,887 ft.) and Ixtaccihuatl ('Istaciwatl'; 17,343 ft.) are conspicuous features in the environment of Mexico. The former is usually ascended from *Popo Park* (8080 ft; Hotel, from $ 5, R. $ 1-5), a summer-resort, on its slope, which is reached by the *Interoceanic Railway* (40 M., in ca. 3 hrs.); but the ascent is arduous and should not be attempted except by experienced mountaineers in good condition. Guides, horses, and food may be obtained at the Park Hotel. The trip takes 2-3 days and costs about $ 40-50 for a single traveller, everything included. From Popo Park we ride in 6-7 hrs to the ranch of *Tlamacas* (12,917 ft.), just below the snow-line, where the night is spent. Thence we proceed on foot over cinders and snow-fields to the steep slope of névé stretching to the summit. In 7-8 hrs. from Tlamacas we reach the ice-sheathed *Crater, 1540 yds. in diameter, from the 'solfatare' of which clouds of vapour perpetually ascend. Part of the descent is often made by tobogganning over the snow-slopes on rush-mats guided by Indians. — The ascent of Ixtaccihuatl (*i.e.* 'the white lady', which is considerably harder, is made from Popo Park or from *Amecameca* (8307 ft; no hotel), which lies

Tranvía
Querétaro
Pachuca
Tacatecas
Est.
Wagner & Debes' Geogl Estab. Leipzig
Pachuca
Jaloxtoc
Vera Cruz
TLALNEPANTLA
Tenayuca
S. Lucas
2771
Cerro d. Chiquihuite
Risco
Santa Mónica
Reyes
Santiaguito
Sta. Cruz
S. José
Tlacoyan
Tres Vigas
Río de los Remedios
Ticomán
Ichuatepec
Del Monte
Xocoyahualco
Enmedio
Escalera
Río Tlalnepantla
Acueducto de Tacubaya
Tacubaya
Careaga
Est. Hutchison
Río de Guadalupe
Amparo
La Patera
Tola
Cristo
Ahuehuetes
Rosario
S. Bartolo
Atzacoalco
Cerro Tepeyac
Chapultepec
Tlilhuaca
S. Andrés
Gran Canal de desagüe
Sta. Cruz
S. Tomás
GUADALUPE
Río Tlalnepantla
Xalpa
Antonio
S. Sebastian
Lago de Texcoco
Amomilla
AZCAPOTZALCO
Magdalena
Salinas
Sta. María
Guadalupe
Aragón
Aragoncan
Huitznahuac
León
S. Bernabé
Clavería
Atepetla
R. Unido
I. de Aragón
TACUBA
Popotla
S. Simón
Tacuba
S. Juanico
S. Joaquín
Arbolito
Peñon
Peñon de los Baños
Magdalena
Est.
Sta. Julia
2268
Est.
MÉXICO
Est.
Est.
Penitenciaría
Morales
Alaja
Est.
Río Morales
Paseo de la Reforma
Sta. Cruz
Tecamachalco
Molino del Rey
Chapultepec
R. d. l. Magdalena
El Castillo
Panteon de Dolores
2271
Est.
Ferro Carril Observ.
R. d. l. Piedad
Atlazolpa
Guadalupe
TACUBAYA
La Piedad
Sta. Anita
La Viga
Pulmas
Napoles
Nalvarte
Reyes
Arenal
Ixtacalco
Belen
Hermito
Nonoalco
S. Borja
Nativitas
Mexicaltzingo
Olivar
S. Simón
Acuico
Mixcoac
Sta. Cruz
Tetepilco
S. Juanico
Castañeda
Portales
Ixtapalapa
Axolle
Xoco
Est. Miranda
S. Pedro
S. Lucas
Est. S. Mateo
Mexicaltzingo
Purísima
Tlacopac
Churubusco
Cerro d. Estrella
2488
Huicochea
Chimalistac
Sta. Catarina
Coyoacán
Tasqueña
Iteres
Telelpa
San Angel
Culhuacán
Olivar
Tizapan
Cuipilco
S. Francisco
Candelaria
Tomatlán
Puente Sierra
S. Pablo
S. Antonio
Pedregal
Sta. Ursula
Juan de Dios
Tezonco
Cerro Zacatepetl
Contreras
R. S. Coapa
Peña Pobre
Huipulco
Lago de Xochimilco
Cerro Peña Pobre
TLALPAM
S. Juan de Dios
Fama
R. S. Buenaventura
Sta. Ursula
Cuernavaca
Kilom.
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Miles

on the Interoceanic Railway, 36 M. from Mexico. The *Sacro Monte* here is a much frequented 'Route de Calvaire'.

Beyond Amecameca and Popo Park the *Interoceanic Railway* goes on to (85 M. from Mexico) *Cuautla* (Hot Springs Hotel & Baths), an interesting old town and favourite health-resort, with natural hot sulphur baths, and (135 M.) *Puente de Ixtla*, also a station on the Cuernavaca-Pacífico Railway (see below).

From Mexico to Cuernavaca, 75 M., *Mexican Central Railway* in 4½ hrs. (fare $ 3.67). This line passes through some charming scenery, and the trip is well worth making. — 7 M. *Tacubaya* (p. 654). From (18 M.) *Contreras* the train ascends rapidly along the mountain-side. Beyond (29 M.) *Ajusco* we pass through a great cut (magnificent retrospect) and reach the vast forest of the *Monte de Huitzilac*. At (38 M.) *La Cima* (9900 ft.) we reach the culminating point of the line and begin the descent, enjoying numerous fine views. 47 M. *Tres Marías*. — 75 M. Cuernavaca (5397 ft.; *Hot. Morelos*, $ 3-5; *Bella Vista*) is an interesting old town of (1900) 9584 inhab., the capital of the state of *Morelos*, with the *Palace of Cortes* (now the police-station), a church of 1529 (with an old clock given to Cortes by Charles IV.), and the beautiful garden of *La Borda*, once a favourite resort of the Empress Charlotte. The well-equipped *Morelos Baths* and the *Country Club* (golf-course) may also be mentioned. The town has numerous sugar-refineries. A visit should be paid to the *Fall of San Antonio* (a ride or drive of ¾ hr.). Longer excursions (fatiguing) may be made to the Aztec temple-pyramid of *Tepotzlan* (20 M.) and the extensive ruins of *Xochicalco* and *Tepozteco*. — Beyond Cuernavaca the railway goes on to (111 M.) *Puente de Ixtla* (terminus of the Interoceanic Railway above mentioned), *Iguala* (147 M.; 7463 inhab.), and (181 M.) *Balsas*, whence it is to be prolonged to the Pacific Ocean.

From Mexico to Pachuca, 62 M., *Mexican Central Railway* in 2½ hrs. (fare $ 3). — 50 M. *Telles*, the junction of a railway to (103 M. from Mexico) *Apulco*. — 62 M. *Pachuca* (Los Baños; Grenfell), the capital of the *State of Hidalgo*, with (1900) 37,487 inhabitants. Here, and at the neighbouring *Real del Monte* (10,000 inhab.), are important silver and iron mines. — Pachuca may also be reached from Mexico by the *Hidalgo & N. E. Railway* (68 M., in 3 hrs.) viâ (16 M.) *Tepa;* and it is also connected by railway with *Tulancingo*, *Tortugas*, *Tula* (p. 649), *Irolo* (p. 656), and *Ometusco* (p. 656).

Other excursions by railway may be made to *Texcoco* (see p. 658); to *Toluca* (see p. 643); to *Orizaba*, *Córdoba*, or *Paso del Macho* (see p. 657); to *San Juan Teotihuacán* (see below); to *Puebla* (p. 658); to *Oaxaca* (p. 659), etc.

From Mexico to *El Paso*, see R. 113; to *Laredo*, see R. 111; to *Eagle Pass*, see R. 112; to *Vera Cruz*, see R. 115.

115. From the City of Mexico to Vera Cruz.

a. Viâ Apizaco and Orizaba.

264 M. Mexican Railway *(Ferrocarril Mexicano)* in 12½-13 hrs. (fare $ 7.20, gold; return-fare $ 12.25, with return by the Interoceanic Railway $ 13.25).

Visitors to Mexico should at least make a trip over this railway as far as Orizaba or Paso del Macho for the sake of the magnificent scenery in the descent from the Mexican Plateau to the coast-level. Views to the right.

City of Mexico, see p. 650. The train ascends to the N.E., passing the *Custom House* (right), *Guadalupe* (p. 654; left), and *Lake Texcoco* (right), and farther on crosses immense plantations of 'maguey' (see p. 649). Popocatepetl and Ixtaccihuatl are seen to the S. — 28 M. *San Juan Teotihuacán* (7415 ft.), with two interesting 'Teocallis', or pyramids, dedicated to the Sun and Moon and

believed to antedate the Toltecs (seen to the left, about 2 M. from the railway). The former is 180 ft. high, with a base measuring 680 ft.; the other is smaller. — 35 M. *Otumba* was the scene of a crucial battle between the Spaniards and Aztecs (July 8th, 1520). 42 M. *Ometusco*, the junction of a line to (28 M.) *Pachuca* (p. 655). 48 M. *Irolo* and (58 M.) *Apam* (7300 ft.) are two of the chief centres of the trade in 'pulque' (p. 649). Beyond Apam we pass from the *State of Hidalgo* to that of *Tlaxcala*. Near (77 M.) *Guadalupe* (8130 ft.) Mt. Orizaba and the Malintzi (see below) are visible to the S.E. — 87 M. *Apizaco* (Rail. Restaurant).

From Apizaco to Puebla, 29 M., railway in 1½ hr. — Good views are obtained of the *Malintzi* (13,460 ft.; left) and, in clear weather, of Popocatepetl, Ixtaccihuatl, and Orizaba. From (11 M.) *Santa Ana* (7430 ft.) we may make an excursion by tramway to (5 M.) the ancient city of *Tlaxcala*, capital of the state of the same name, with (1900) 2715 inhab., interesting churches, relics of Cortes and other early Spaniards (in the Casa Municipal), etc. — Beyond (22 M.) *Panzacola* the pyramid of *Cholula* (p. 659) is seen to the right. — 29 M. *Puebla* (see p. 658).

Near (103 M.) *Huamantla* (6000 inhab.) the railway reaches its highest point (8310 ft.). 113 M. *San Marcos* (p. 660), the junction of the Interoceanic Railway. — 137 M. *San Andrés* is the starting-point for the ascent of ***Mt. Orizaba** or **Citlaltepetl** (18,242 ft.), the highest mountain in Mexico and probably inferior to Mts. McKinley and Logan only among the peaks of N. America (comp. p. 686).

The ascent is exhausting but not difficult. From San Andrés a tram-car drawn by mules (the descent is made by gravity) runs in 1 hr. to (6 M.) *Chalchicomula* (inn), a picturesque village, with a fine Renaissance church, situated on the W. side of the mountain. Hence, riding first through fields of agave and grain, then for several hours through forest, we reach (in about 9 hrs.) the saddle between the Orizaba and the Sierra Negra. The night is spent here in a cavern, known as the *Cueva de los Ladrones*. The climb from this point to the summit takes 5-8 hrs. according to the state of the snow. For the first hour or two, it is still possible to ride; but the rest of the way has to be done on foot, over grass, débris, and snow. The highest point on the edge of the crater is indicated by a cross. Popocatepetl and Ixtaccihuatl are seen due W., the Malintzi to the N.W., the town of Orizaba far below, and, in clear weather, the Gulf of Mexico to the E.

From (152 M.) *Esperanza* (8045 ft.; Rail. Restaurant) a tramway runs to (31 M.) *Tehuacán*, on the railway from Puebla to Oaxaca (p. 659). — Here begins a very rapid descent, to surmount which trains coming in the reverse direction require the aid of double-headed Fairlie locomotives. The scenery on this portion of the line is very grand, and its engineering is very remarkable. The vegetation becomes of tropical richness as we near the *tierra caliente*, or hot lands of the coast, including orange, lime, citron, banana, and pomegranate trees, sugar-cane, palms, coffee plants, and a great variety of brilliant flowering trees and shrubs. — Beyond (155 M.) *Boca del Monte* (7925 ft.), where we look down into the valley 3000 ft. below us (right), the train runs along a terrace on the mountain-side, threading several tunnels and crossing several bridges. 160 M. *Alta Luz*. At (169 M.) *Maltrata* (5550 ft.) we reach the smiling valley of *La Joya*. A little farther on we pass the wild gorge named the **Barranca*

del Infiernillo ('Little Hell'), with the *Aroyo de Maltrata* 600 ft. below us. Near Orizaba we round the *Cerro del Borrego*, where a small French force repulsed a large number of Mexicans in 1862.

182 M. **Orizaba** (4030 ft.; *Francia*, good but rather expensive, with a lovely patio; *La Borda; Gran Hotel; Restaurant* at the station, good native beer), a quaint little town of 33,539 inhab., lies in a valley surrounded by mountains and contains some interesting churches, with works of the local painter Barranco. Excellent fruit may be bought here very cheaply. The reed-thatched huts of this region are thoroughly tropical-looking. An excursion may be made by carriage or on horseback to the waterfall of the *Rincón Grande*.

Beyond Orizaba we cross the fine **Ravine of the Metlac* by a bridge 92 ft. high, and other bridges and tunnels are passed (good engineering). 193 M. *Fortín.* — 198 M. *Córdoba* (2710 ft.; Gran Hotel Zevallos; Diligencias), with 8736 inhabitants.

From Córdoba to Santa Lucrecia, 203 M., *Vera Cruz & Pacific Railway* (one train daily in each direction; 13¼ hrs.). — 30 M. *Tezonapa;* 38 M. *Acatlán*, the junction of a branch-line to *Izucar de Matamoros;* 58 M. *Tierra Blanca*, the terminus of a branch from (62 M.) Vera Cruz. At (105 M.) *El Hule* we cross the *Río Papaloapán* by a bridge ½ M. long. 125 M. *Perez.* — 203 M. *Santa Lucrecia.*

Santa Lucrecia is also a station on the *Tehuantepec National Railway* over the Isthmus of Tehuantepec (188 M., in 10¼ hrs.). This line is expected to be a formidable competitor of the Panama Canal for interoceanic traffic; and important harbour-works have been constructed at both its termini. It begins at *Puerto México* (formerly *Coatzacoalcos*), on the Gulf of Mexico. 54 M. *Juile;* 79 M. *Santa Lucrecia* (see above); 103 M. *Palomares;* 126 M. *Rincón Antonio;* 159 M. *San Gerónimo;* 176 M. *Tehuantepec*, a town of 10,386 inhab.; 188 M. *Salina Cruz*, on the Pacific Ocean.

210 M. *Atoyac* (1510 ft.). A little farther on are the **Falls of the Atoyac.* 216 M. *Paso del Macho* (1500 ft.).

Beyond this point the scenery is uninteresting, and this may be made the turning-point for those who do not intend to take ship at Vera Cruz. Near (238 M.) *Soledad* we cross the *Jamapa* by a long bridge. 254 M. *Tejería.*

264 M. **Vera Cruz,** now officially written *Veracruz* (*Hotel de México*, from \$ 3½; *Diligencia*, from \$ 2½; *Universal, Colón*, from \$ 3; U. S., Brit., and Ger. Con.), a seaport on the *Gulf of Mexico*, with (1900) 24,085 inhab. and a good harbour, lies in a dreary sandy plain and contains comparatively little of interest to the tourist. The climate is hot and very unhealthy in summer. It was here that Cortes landed in 1519. The duties of the scavenger are here performed largely by the buzzard.

From Vera Cruz to Alvarado, 43 M., railway in 3 hrs. — The line runs to the S., along the coast. — *Alvarado* (hotels) lies on an arm of the sea, which receives the waters of two navigable rivers, the *Río Papaloapán* and the *Río San Juan.* A trip of 3 hrs. may be made up the former to the small town of *Tlacotalpam*, with its picturesque plaza.

From Vera Cruz to *Tierra Blanca*, see above.

Steamers ply regularly from Vera Cruz to Havana, New York, New Orleans (\$ 34.55), Galveston, and other American ports; and good sailors may prefer one of these routes in entering or leaving Mexico.

b. Viâ San Lorenzo and Jalapa.

293 M. Interoceanic Railway *(Ferrocarril Interoceanico)* in 13¼ hrs. (fares as at p. 655).

Mexico, see p. 650. The railway follows the line to Amecameca (p. 654) to the S.W., along the S.W. shore of *Lake Texcoco*, as far as (11 M.) *Los Reyes*, and then turns to the N. The inhabitants of (17 M.) *San Vicente* are largely occupied in catching flies on the neighbouring marshes and compressing them into bricks for bird-food. — 24 M. *Texcoco* (7475 ft.; Colón, R. from 50 c.), on the site of an ancient town of the *Chilkemekes*, with Aztec remains. — 38 M. *Metepec*, with the 'Sun' and 'Moon' pyramids; 43 M. *Otumba* (p. 656); 56 M. *Irolo* (p. 656).

62 M. *San Lorenzo*, in the state of *Hidalgo*, is the junction of the line to Puebla (R. 115 c.). — 72 M. *Iturbe*, in the state of *Tlaxcala;* 82 M. *Sanz;* 99 M. *Pavón*, with a hacienda where bulls are bred for the arena.

134 M. *Oriental* (Hotel, with restaurant, adjoining the railway, R. from $ 1) is the junction of lines to (52 M.) *Teziutlán* (33,000 inhab.; copper-mines) and to (50 M.) *Puebla* (see below). — 146 M. *Tepeyahualco*, with another famous bull-raising hacienda. — Beyond (163 M.) *Perote* (8085 ft.) we skirt the N. side of the *Cofre de Perote* or *Nauhcampatepetl* ('square mountain'; 14,049 ft.), passing great fields of lava.

213 M. **Jalapa** or *Xalapa* (4682 ft.; *Gran Hotel; Mexicano*, $ 2), a quaint old city with (1900) 20,388 inhab., beautifully situated among the mountains, is the capital of the *State of Vera Cruz* and, perhaps, the most charming summer-resort in Mexico, with a cool and refreshing climate. Many delightful excursions can be made from it. Jalap derives its name from this city. The women of Jalapa are distinguished for their beauty. — 293 M. **Vera Cruz**, see p. 657.

c. Viâ Puebla and Jalapa.

339 M. Interoceanic Railway in 20 hrs., with halt of 3⅓ hrs. (3 to 6 a.m.) at *Puebla* (fares as at p. 655)

From Mexico to (62 M.) *San Lorenzo*, see above. The Puebla line here diverges to the right (S.) from that described above. 97 M. *Atotonilco;* 103 M. *Gillow*.

129 M. **Puebla** (7120 ft.; *Arcada*, from $ 6; *Diligencias, Gran, Francia*, from $ 2½; *Magloire, Jardín*, from $ 2; U. S. Con. Agent, *Mr. William Headen*), the capital of the state of the same name, with (1900) 98,191 inhab., was founded in 1531 and is one of the most attractive cities in the country. The use of glazed and coloured tiles in external and internal decoration is a characteristic feature. Its most interesting products for tourists are the articles made of Mexican onyx, baskets and mats of coloured straw, and pottery. The *Cathedral, dating from the middle of the 17th cent., with

later additions, is scarcely inferior to that of Mexico in size and importance, while its interior is more richly decorated. It is in the Spanish Renaissance style, with a central dome, barrel-vaulting, and two lofty towers (view). Among the points of interest in the interior are the onyx decorations, the marquetry work, the paintings, the tapestry, the altars, and the organ-cases. — Other interesting churches are those of *San Francisco*, *La Compania*, and *Nuestra Señora del Carmen*. — Near the railway-station is a large new *Penitentiary*. — A monument has been erected to the victims of the war of 1862–63 (see below). — The **Paseo* along the *Rio Atoyac* affords a pleasant walk. — A visit should be paid to *Fort Guadalupe*, on the hill where took place the famous battle of the Cinco de Mayo (1862). The fort commands a splendid **View, including Mts. Popocatepetl, Ixtaccihuatl, Orizaba, and Malintzi.

About 8 M. to the W. of Puebla (railway; return-fare 45 c.) is *Cholula* (7100 ft.; 7000 inhab.), with some interesting churches and the famous *Pyramid of Cholula, an artificial mound of sun-dried brick and clay, 204 ft. high, with a base about 1000 ft. square (approximately). It is built in terraces, three of which are distinctly recognizable. The top, consisting of a platform 165 ft. square, crowned by the *Church of the Virgin de los Remedios*, is reached by a winding stone-paved road, ending in a flight of steps. The *View is very fine. The construction of the pyramid is ascribed to the Olmecs or Toltecs, but its date and purpose are obscure.

From Puebla to Oaxaca, 228 M., *Mexican Southern Railway (Ferro. carril Mexicano del Sur)* in 13 hrs. (one train daily in each direction; return-fare $15, from Mexico City $25.40; tickets available for 15 days) This line traverses one of the finest districts in Mexico, the greater portion lying amid tropical scenery, though the termini are both in the temperate zone. — 11 M. *Amozoc* is the highest point on the line (7590 ft.). Beyond a beautiful valley affording glimpses of Malintzi and other volcanoes and commanding a distant view of Popocatepetl (p. 654), the organ-cactus trees become a prominent feature, and the prickly pear, mezquite, huisache, and lechuguilla gradually give place to date-palms and plantains. — 54 M. *Tlacotepec*, junction of a branch-line to *Mucio Martinez*. — 79 M. *Tehuacán* (5400 ft.; Riego, $ 2-4; México, $ 2-3½), a beautifully situated and frequented resort, with 7395 inhab., has mineral springs and baths resembling those of Carlsbad. A branch-railway runs hence to (31 M.) *Esperanza* (p. 656). — At (112 M.) *Venta Salada* the first sugar-cane plantations are reached. 121 M. *San Antonio*. The train now enters the savage *Cuez Canyon*, rivalling the canyons of Colorado. 146 M. *Quiotepec* is the lowest point on the line (1765 ft.); and at (159 M.) *Tomellín* (dinner station) begins the steep ascent. We mount through the rapidly changing vegetation of the beautiful *Tomellín Canyon*, and at (200 M.) *Las Sedas* (6300 ft.) find ourselves amongst pine-woods. — 228 M. Oaxaca (pron. 'Wahaka'; 5065 ft.; *Chavez*, from $ 2; *Francia*, $ 1½-3½, good), an ancient historical city with (1900) 35,049 inhab. and several handsome churches, is one of the most flourishing in Mexico. It was the birthplace of Presidents Juárez (1806-72; monument) and Porfirio Diaz (1830). Above the city, to the S.W., rises *Monte Albán* (6245 ft.), with some interesting ruins and commanding a fine *View (road to the top, 4 M.). — About 25 M. to the S.E. of Oaxaca lie the extensive, well-preserved, and mysterious ruins of *Mitla* (good accommodation at a hacienda; ca. $ 2½ per day). These are reached by carr. ($ 18-25, incl. night at Mitla) or on horseback ($ 1½ per day) in 4-5 hrs. We may send the carriage on to *Tule* and proceed to that point by tramway. The great tree of Tule, a kind of cypress (Taxodium Mexicanum), is 154 ft. in circumference and bears an inscription placed on it by Humboldt. Cortes took the title of Duke of Oaxaca from this valley. — Beyond Oaxaca the railway proceeds to the S.,

viâ (24 M.) *Ocatlán*, to (31 M.) *Ejutla*. Numerous silver-mines are worked in the Oaxaca and Ocotlán district.

From Puebla to Tlancualpicán, 77 M., *Interoceanic Railway* in 5¾ hrs. — 28 M. *Atlixco*; 52 M. *Matamoros* (not to be confounded with the place named at p. 645). At (65 M.) *Atencingo* the line forks, the right branch running to *Cuautla* (p. 655). — 77 M. *Tlancualpicán.*

Beyond Puebla our line bends to the left (N.E.). 163 M. *San Marcos* (p. 656), the junction of the Mexican Railway. At (180 M.) *Oriental* we rejoin the line described in R. 115 b, which we follow thence to (339 M.) **Vera Cruz** (p. 657).

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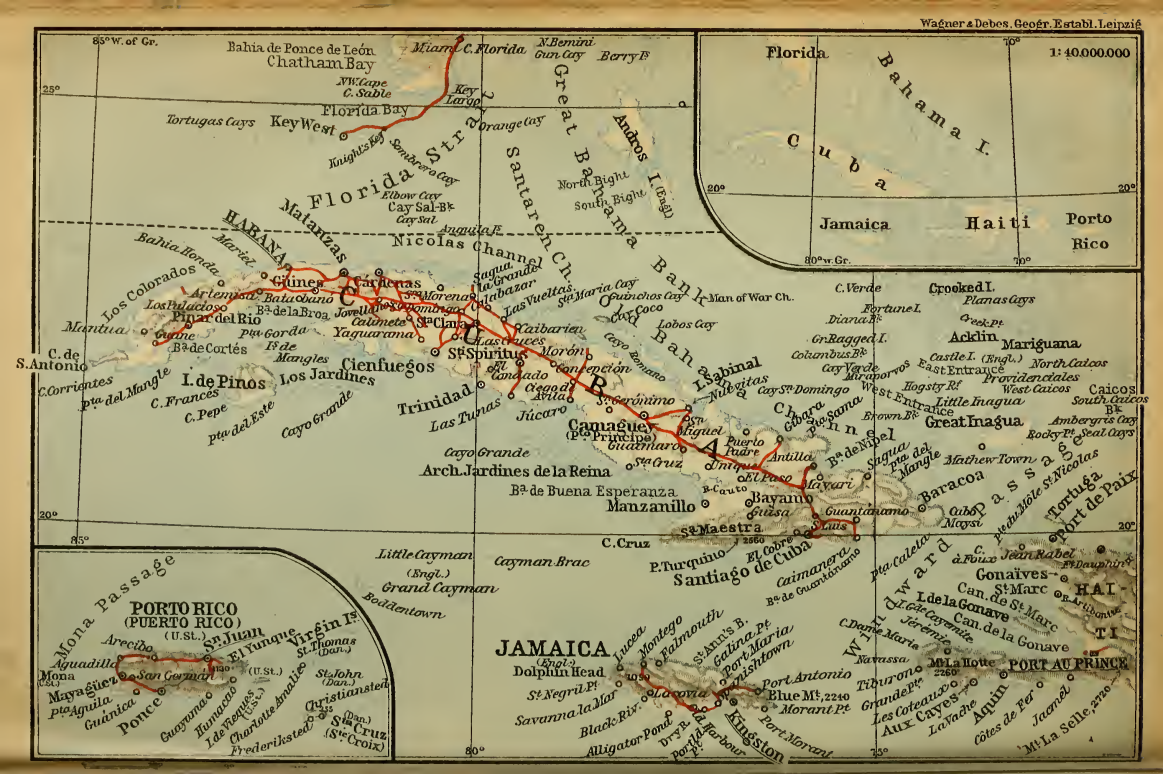

VII. CUBA. PORTO RICO.

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Cuba.

Cuba, the 'Pearl of the Antilles', is the largest, richest, and most populous of the West Indian Islands, and lies about 100 M. due S. of Florida. Its extreme length from Cape Maysi on the E. to Cape San Antonio on the W. is 730 M., its width varies from 25 M. to 100 M., and its area is about 44,000 sq. M. (*i.e.* about the size of Pennsylvania). In 1907 it contained 2,048,980 inhab., of whom two-thirds were white and one-third coloured. [The original Indian native race has entirely disappeared.] The irregular coast-line contains numerous commodious harbours, usually entered by narrow channels. The surface consists mainly of undulating plains, but the E. part is largely occupied by the *Sierra Maestra*, culminating in the *Pico Turquino* (8400 ft.), the *Sierra del Cobre*, and other mountains, while to the extreme N.W., in the province of Pinar del Río, is the range named *Sierra de los Organos* (2600 ft.). Few of the rivers are long or navigable. The fertile soil produces large quantities of tobacco (often raised under 'cheesecloth' shelters), sugar-cane, sweet potatoes, bananas, etc. — Except during the short occupation by the British in 1762, Cuba was held by Spain from its discovery by Columbus in 1492 down to Dec. 10th, 1898, when it was handed over by treaty to the United States. From Jan. 1st, 1899, until May 20th, 1902, the island was under governors appointed by the United States, who did much to improve its condition in every way and (in particular) practically stamped out the scourge of yellow fever. For the following four years the 'Republic of Cuba' was ruled by a popularly elected President; but internal dissensions again necessitated the intervention of the U. S. in Sept., 1906, when the island was put under a Provisional Governor (comp. p. 664) appointed by the President of the United States. This second 'military occupancy' lasted till 1909, when the island once more became 'Cuba Libre', under an elected President.

Approaches. Cuba is easily reached by steamer from various ports in the United States. The shortest sea-routes are those of the Peninsular & Occidental S.S. Co. from *Knight's Key (Key West)* and *Port Tampa*. particulars of which are given at pp. 623, 628. — Another excellent service is that of the Ward Line, leaving *New York* (Pier 13, East River) twice weekly and reaching Havana in 3½-4 days (fare $ 40-45). — The steamers of the Munson Line ply from *New York* (Pier 9, E. River) once or twice a month to *Nuevitas*, the port of Camaguey (p. 667; fare $ 35). — *Santiago*, on the S. coast of Cuba, may be reached by sea in 16 hrs. from *Kingston*

(Jamaica), to which steamers of the Royal Mail Steam Packet Co. and the Hamburg American Line ply regularly from New York. It is also reached from *New York*, viâ *Nassau*, by a boat of the Ward Line (p. 661). — From Europe Havana is reached by steamers of the Hamburg American Line (from *Hamburg*, *Havre*, *Plymouth*, and Spanish ports). — Other lines run from *New Orleans*, *Mobile*, *Galveston*, *Halifax*, etc.

English is generally understood at the larger hotels, but a knowledge of Spanish will, of course, be found useful (comp. p. 640).

Railways. The *United Railways of Havana*, the *Cuba Railroad*, the *Western Railway of Havana*, the *Cuba Central Railways*, and the *Cuba Eastern Railroad* practically give access to all parts of the island likely to interest the tourist. The trains run on Havana time, which is ½ hr. ahead of Central time (see p. xiv).

Passports. Custom House. Passports are not needed in Cuba. There is no duty on the articles usually in the possession of the ordinary tourist. On re-entering the United States travellers are subject to the ordinary Custom House and quarantine regulations (see p. xiv). On landing at Havana the traveller should find out from the port physician just what quarantine regulations are in force.

Money. Expenses. The legal tender currency used in Cuba includes the money both of the United States and of Spain. The Spanish *Peso* ($1) contains 5 *Pesetas* (value 20 c.) and 100 *Centavos*. A *Real* is nominally worth about 10 c. (comp. p. 640). The exchange varies but it is always in favour of the American currency ($1 American generally = ca. $1.15 Spanish; Amer. dollar ca. 49½*d.*, Span. gold dollar 45¼*d.*, Span. silver dollar 40*d.*). Railway-fares, hotel-rates, and so on, are generally quoted in American money, but cab-fares and shop-prices are given in Spanish money. A considerable amount of French gold is also current (luis or louis = $ 4). A supply of Spanish money should be obtained on arrival at Havana, and may be obtained from the *Cambios de Moneda* (money-changers) at almost every street-corner. — The daily expenses of a tour in Cuba are about the same as in Mexico (comp. p. 640).

Climate. Season of Tour. The climate of Havana is warm in summer (mean temp. ca. 80° Fahr.) and cool in winter (mean ca. 70° Fahr., min. ca. 50° Fahr.). The best season to visit Havana is from Nov. to April inclusive. Most of the rainfall takes place between May and October. During most of the winter light summer clothing may be worn, but thin overcoats are sometimes comfortable and warmer clothing is useful during a N. wind. The prevailing wind throughout the year is the Easterly Trade Wind.

Postal Arrangements. These are the same as in the United States, but Cuba has a separate issue of stamps, with values in centavos.

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116. Havana.

Arrival. The steamer is visited by the Health Officer before the passengers land, by tender, at *La Machina Wharf* (Pl. H, 3). Luggage is examined on the wharf. Baggage may be checked from the wharf to the hotel. *Cab.* see p. 663.

Railway Stations. *Villanueva Station* (Pl. F, 4), of the United Railways of Havana, for Rincón, Guanajay, Batabanó, Güines, Colón, and all intermediate stations of the United Railways of Havana and also for the through-trains to Santiago de Cuba; *Regla Station* (reached by ferry from Luz Wharf or Muelle de Luz, Pl. H, 4; fare 10 c.), a second station of the same railway, for Matanzas, Santa Clara, and all other points to the E. of Havana; *Cristina Station* (Pl. E, 6), for the Western Railway of Havana (p. 668); *Concha Station* (Pl. B, C, 4), for Marianao (p. 666).

EAST BOSTON

Inst. Geogr. de Wagner & Debes, Leipzig.

HABANA
1:20.000
Castillo del Morro
Castillo de la Cabaña
Cast. de la Punta
Cárcel
Maestranza
Catedral
Fuerza
Pl. de Armas
Muelle de Caballería
Sto Domingo
Bolsa
Pl. de S. Francisco
Aduana
La Machina
Muelle de Luz
Regla
Alameda de Paula
S. Agustín
Pl. Vieja
S. Teresa
S. Clara
Belén
la Merced
Parque Central
Parque Isabel la Católica
Estación de Villanueva
Campo de Marte
India
Mercado Tacón
Arsenal
Almacenes
Hospit. militar
Fábrica de Gas
Ensenada de Atares
Cayo Cruz
Calzada de S. Lázaro
C. del Genio
C. del Refugio
C. de Colón
Calle del Trocadero
C. de Cuarteles
C. de Chacón
C. del Tejadillo
C. del Empedrado
C. de O'Reilly
C. del Obispo
C. de Obrapía
C. de la Lamparilla
C. de la Amargura
C. del Teniente Rey
C. de Ricla ó Muralla
C. del Sol
C. de Sta Clara
C. de Luz
C. de Acosta
C. de Jesús María
C. de la Merced
C. de Paula
C. de San Isidro
C. de los Desamparados
C. del Príncipe Alfonso
Güines
E
F
G
H
1
2
3
4
5
6

EAST BOSTON

Hotels. Inglaterra (Pl. a; F, 3), from $4½; Miramar (Pl. b; F, 1), on the Malecón, with sea-view, R. from $5; Plaza, Calle de Neptuno, cor. of Calle de Zulueta (Pl. F, 2, 3), from $4; Pasaje Pl. c; F, 3) from $4½; Telegrafo (Pl. d; F, 3), from $4; El Louvre (Pl. e; E, F, 3), $4-6, R. $2-5; Florida (Pl. f; G, 2), from $3; Trotcha, in the suburb of Vedado (comp. inset map), pleasant for a prolonged stay, from $3; Luz, Oficios 35, from $2½; Sevilla, Calle del Trocadero, cor. of Calle de Zulueta (Pl. F, 2), from $5, R. from $2; Isla de Cuba, Calzada Príncipe Alfonso 43 (Pl. E, F, 4), from $2; Alcazar, from $2½; Harvey 8, Prado 99, R. from $1; Brooklyn, R. from $1. — Rates are lower in summer, and in any case it is advisable to have prices fixed in advance and to ascertain whether they are quoted in American or Spanish currency.

Restaurants at the Miramar (D. $2, with music) and other hotels; also, **El Carabanchel*, Calle de San Miguel 8, near Central Park; *Paris*, Calle de O'Reilly 14 (high charges); *Harvey*, Calle de Zulueta 32. — Cafés are a characteristic feature of Havana life and are very numerous (*e.g.* adjoining Central Park). Coffee, fruit-drinks, and ice-cream (served with 'barquillos', a kind of funnel-shaped wafer) are the objects most in request.

Electric Tramways run through the chief streets and to various suburban points (fare within city limits 5 cents or 7 centavos). — The Havana Central R.R. (electric) runs to the S.W. to (31 M.) *Guanajay* (1½ hr.; fare 91 c.) and to the S.E. to (32 M.) *Güines* (93 c.) and (35 M.) *Providencia* (1½-1¾ hr.; $1.04).

Cabs. Per drive within the city (*i.e.* to the E. of the Calzada de Belascoain, Pl. C, D, 2-6), 1-2 pers. 20. 3 pers. 25, 4 pers. 30 c.; within second zone, extending to the Calzada de la Infanta (Pl. B, 2-4), 25, 30, 35 c.; in the third zone, 40, 45, 50 c. Per hour $1¼, $1½, $1¾. Double fares from 11 p.m. to 6 a.m. — '*Seeing Havana*' *Automobiles* visit the chief sights (fare $1½).

Places of Amusement. *Teatro Nacional* (Pl. 7; F, 3), for opera; *Payret Theatre* (Pl. 8; F, 3); *Albizu* (Pl. 6; F, 3), Spanish plays; *Martí*, cor. of the Calle de Dragones and Calle de Zulueta (Pl. F, 4); *Cuba; Alhambra*, Calle del Consulado 134 (Pl. F, 2), for men only; *Chinese Theatre*, Calle de la Zanja 35. — The national ball-game of *Jai Alai* (similar to the Juego de Pelota of the Basques) is played in the *Frontón*, cor. of the Calle de la Concordia and Calle del Oquendo (Pl. C, 3; adm. from 50 c. to $2). — The *Carnival Season* is celebrated in Havana with considerable gaiety.

Post Office (*Correo*; Pl. 3, H 2), Calle de O'Reilly (open 8-4). — **Telegraph Office** in the Senate Building (p. 665); for cable messages, at the corner of the Calle de Cuba and Calle del Obispo; also in the chief hotels.

Churches. Services in English are held in the Calle de Neptuno, cor. of the Calle del Aguila (Episc.); Calle de las Virtudes 10 (Meth. Episc.); Calle Real de la Salud 40 (Presb.); at the corner of the Calle de Zulueta and Calle de Dragones (Baptist); and Calle de Someruelos 6 (Congreg.).

Envoys. United States, *Edwin V. Morgan*, Calzada del Malecón 7a; Great Britain, *A. C. Grant-Duff*, Calle del Aguiar 101; Germany, *H. von Eckardt*, Calle de las Virtudes 2.

Consuls. United States Consul-General, *James Linn Rodgers*, Calle de Galiano 84; British Vice-Consul, *A. Charlton*, Calle del Aguiar 101; German Consul, *von Eckardt* (see above).

Clubs. *American Club*, Prado 83, near Central Park; *Centro Asturiano*, Calle de Zulueta. Central Park; *Centro de Dependientes*, see p. 664; *Union Club*, Calle de Zulueta; *Spanish Casino*, Prado, cor. of the Calle de Neptuno; *German Club*, on the second floor of the same building

Newspapers. The *Havana Post* (5 c.; morning) and *Havana Daily Telegraph* (5 c.; evening) are two daily papers published in English.

Physicians. *Dr. Clifford Ryder*, Prado 99 (10-3 & 7-8); *Dr. Laine* (physician to the American Hospital at Vedado), Prado 70 (12-2); *Dr. Finlay*, Calle de Neptuno 22. — **Dentists.** *Dr. Rhome*, Prado 98; *Dr. Erastus Wilson*, Monte 51, Colón Park.

Havana (Span. *Habana* or *San Cristóbal de la Habana*), the capital and largest city of Cuba, lies on the N.W. coast of the island, on an excellent harbour entered by a narrow channel defended by

forts (comp. below). In 1907 it contained 297,159 inhab., about 50 per cent of whom were native whites, 25 per cent foreign whites, 14 per cent 'mestizos', and 11 per cent negroes. There are also 2-3000 Chinese and a few Japanese and Indians. The streets of the old part of the city are very narrow, and the buildings are usually in a low and heavy semi-Oriental style, with windows protected by gratings. The more modern streets are, however, wide and handsome, and the 'paseos' and parks are very attractive. The doors, sometimes 10-15 ft. in height, are often of solid mahogany or other richly coloured native wood and are generally furnished with ponderous bars and mounts.

Havana was founded on its present site in 1519 and became the capital of the island in 1552. Its early history is a record of ravages by buccaneers, and in 1762 it was captured by the British and held by them for a year. The blowing-up of the U. S. battleship 'Maine' in the harbour of Havana in 1898 was the determining incident of the war with the United States, which resulted in the loss of Cuba to Spain (comp. p. 661). — Many of the street-cries of Havana are very quaint and musical.

The visitor may naturally begin his exploration of Havana at **Central Park** (*Parque Central;* Pl. F, 3), the focus of the social life of the city, with its laurels, its brilliant flowering shrubs, and its garden-beds. It is adjoined by some of the chief hotels and theatres, and it is adorned with a monument to *José Martí* (1853-95), the 'Apostle of Cuban Independence', by J. V. de Saavedra. A band plays here Sun. & Wed. evenings (chair 5 c.). — Adjoining Central Park on the E. is Monserrate Square, with a statue, also by Saavedra, of *General Francisco de Albear* (1811-89), the engineer who constructed the Vento Aqueduct (comp. p. 668).

To the N. of Central Square stretches the *Prado ('meadow'), a wide and fashionable promenade shaded with formally-trimmed laurel-trees. Following it, we pass the *Spanish Casino* (l.), the *American Club* (r.; p. 663), and the *Centro de Dependientes* (r.), an association of business clerks. Also to the right, almost at the end of the Prado, is the *Cárcel* (Pl. F, 1), a large prison with room for 5000 inmates (now little used). Just to the N. of this is the *Students Memorial*, erected to eight Cuban students executed here by the Spaniards in 1871 on a comparatively trivial charge.

The Prado ends at the *Castillo de la Punta* (Pl. F, 1), constructed in 1659 to command the entrance of the harbour and now used as barracks.

On the opposite side of the channel is the more imposing **Morro Castle** (*Castillo del Morro;* comp. inset map at p. 663), which was constructed in 1597 and is partly hewn out of the living rock. It played an important part in the siege of 1762. To the S.E., flanking the ship-channel, is the enormous fort known as the *Cabaña* (Pl. H, 1). The Morro commands an admirable view of the city, the harbour, and the Gulf of Mexico. The charge for a boat to the Cabaña or the Morro is 10 c. each person.

From the Punta Castle the Calzada del Malecón (Pl. F-C, 1, 2), an esplanade protected by a sea-wall, extends towards the W. for about 1 M., ending at the site of the old Reina Battery (razed

in 1904). It affords a fine view of the Gulf of Mexico. We may go on towards the W. to the charming residential suburb of *Vedado* (comp. inset map at p. 663), past the *Casa de Beneficencia* (Pl. C, 2), a large orphan asylum and hospital, the *San Lázaro Leper Hospital* (Pl. B, C, 2), and the *Santa Clara Battery* (Pl. A, 1).

In following the Parque Isabel la Católica, to the S. from Central Park, we pass the *Payret Theatre* (p. 663) and soon reach the Campo de Marte (Pl. F, 4) or *Parque Colón*, with its luxuriant vegetation and the *India Fountain* (Pl. F, 4).

A little to the W. of the Campo de Marte is the interesting Mercado de Tacón (Pl. E, 4; Tacon Market) or *Plaza de Vapor*, among the objects sold at which are tropical fruits and vegetables, fish, and palm-leaf baskets.

The Calzada de la Reina, continued by the Paseo de Tacón or Carlos Tercero (with a statue of Carlos III. by Canova), leads hence to the *Concha Station* (p. 663), the *Almendares Baseball Grounds*, the *President's Summer Palace* (Quinta de los Molinos or de los Capitanes Generales; Pl. B, 4), and the *Botanical Gardens* (Pl. A, B, 4).

Returning once more to Central Park, we may now bend to the E. and visit the oldest and most interesting part of the city. We follow either the Calle de O'Reilly or Calle del Obispo (Pl. F-H, 3, 2), two narrow and busy thoroughfares, with many of the most attractive shops in Havana. Between the two streets stands the *Church of Santo Domingo* (Pl. G, H, 2; 1578). Both of them debouch on the —

Plaza de Armas (Pl. H, 2), with a statue of Ferdinand VII. (1808-33) in the centre, which was the chief square of the earliest city. On the W. side of the square stands the **President's Palace** (*Gobierno;* Pl. 4, H 2), a large edifice of 1834, with a colonnaded façade. It also contains the office of the Mayor and City Council. In the patio is a statue of Columbus. Adjacent, at the corner of the Calle de O'Reilly, is the *Senate Building* (*Senado*, Pl. 5, H 2; 24 senators). — On the N. side of the Plaza rises the fortress of **La Fuerza** (Pl. H, 2), dating from 1538, with a tower ornamented by the figure of an Indian girl (view). — On the E. side of the Plaza is the **Templete** (Pl. 9; H, 2), a small church erected on the spot where the Spaniards celebrated their first mass in 1519. It contains some paintings by *Escobar* (shown once a year only, on Nov. 16th). In front of it is a monument with a bust of Columbus, shaded by a ceiba-tree, which is said to be a descendant of one growing on the spot when the city was founded.

A little to the N.W. of the Plaza de Armas is Cathedral Square, with the **Cathedral** (*Catedral de la Virgen María de la Concepción;* Pl. G, 2), a large edifice built by the Jesuits in 1724, with a central dome and two towers flanking the façade. The interior contains several paintings, including a small one ascribed to *Murillo*. From 1795 to 1898 this church enshrined the remains of Christopher Columbus, but in the latter year they were removed to Seville.

A walk along the **Water Front** will give some idea of the commerce of Havana. We may begin it at the *Office of the Captain of the Port* (Capitanía; Pl. 2, H 2) on the Caballería Wharf, at the foot of O'Reilly St. (p. 665), and end it at the *Alameda de Paula* (Pl. H, 4) and the quaint church of *San Francisco de Paula.* Adjoining the *Luz Plaza* is the wharf for the ferry (comp. Pl. H, 4) to *Regla* (comp. p. 662). The wreck of the 'Maine' (p. 664) is still visible in the harbour.

Among other points of interest in Havana are *La Merced* (Pl. H, 4), the most fashionable church in the city; the *Church of San Agustín* (Pl. G, 3; 1608); the *Belén Church* (Pl. G, 4), belonging to the Jesuits, with a college and observatory; the *Biblioteca Nacional* or *Public Library* (Pl. 1, G 2; ca. 40,000 vols.); the *Arsenal* (Pl. F, G, 5; now occupied by the Department of Public Works); the *Castillo de Atares* (comp. inset map at p. 663), built in 1767 and now a prison; and the remains of the old *City Wall* in the Calle de Monserrate, between the Calle de la Obrapía and Calle de Ricla (Pl. F, 3, 4). A visit should be paid to a *Tobacco Factory*, such as those of the Henry Clay & Bock Co. (permit obtained at Calle de Zulueta 10) or the Marca Independiente de Tabacos de Vuelta Abajo.

Excursions. On the hills to the W. of the city (see inset map on plan; tramway 5 c.; cab $ 1½) lie the **Cemetery of Cristóbal Colón**, containing many interesting tombs and monuments and affording a good view; the **Castillo del Príncipe**, with a military hospital; and the **University** (*Universidad*, Pl. A 3; 550 students). — **Marianao**, reached by railway (fare 20 c.; see p. 663) or trolley (fare 10 c.), is a picturesque summer-resort 6½ M. to the S.W., with an ostrich-farm. About 3 M. to the N. of it is the *Playa de Marianao*, much frequented by bathers. — *Chorrera*, ca. 3 M. to the W. of Havana, at the mouth of the *Río Almendares* or *Río la Chorrera*, contains an old fort of 1646. — *Cojímar* (Hotel Campoamor, well spoken of), 3 M. to the N. of *Guanabacoa* (tramway from Regla, p. 663), is another watering-place. — A visit should also be made to a *Sugar Plantation.*

From *Havana* to *Santiago de Cuba*, see below; to *Pinar del Río and Guane*, see R. 118.

117. From Havana to Santiago de Cuba.

532 M. (from Regla Station) RAILWAY in 25 hrs. (through-fares, 1st class $ 24.03, 3rd class $ 12.01; sleeper $ 5). As far as *Santa Clara* (fares $ 8.44, $ 4.25; sleeper $ 3) we follow the tracks of the United Railways of Havana and beyond that of the Cuba Railroad.

Havana (Regla Station), see p. 662. Through-trains start at Villanueva Station (p. 662) and proceed by a loop-line viâ *Ciénaga* and *Jesús del Monte* to (9 M.) *Pinos*, about 1 M. to the S.E. of Regla Station. 38 M. (from Regla Station) *Empalme*, junction for (9 M.) *Madruga*, (20 M.) *Güines*, and (36 M.) *San Felipe.* We then enter the province of *Matanzas.* — 53 M. **Matanzas** (*Hotel Louvre*, from $ 2½, R. from $ 1; *Grand Paris*, $ 2½-3; Brit. Vice-Consul, *Mr. St. Hamilton*), a seaport with (1907) 36,009 inhab., on the *Yumuri* and *San Juan Rivers.* Visits should be made to the beautiful *Yumuri Valley* (to the N.W.; palms) and (1½ hr. there and back) to the *Caves of Bellamar* (adm. $ 1; fine stalactites; carriage $ 1.20 per hr.). Good view from the *Cumbre*, with the hermitage of *Montserrate.*

Beyond Matanzas the line bends to the S.E. 89 M. *Jovellanos* is the junction of lines to the seaport and watering-place of (17 M.) *Cárdenas* (Isla de Cuba, with restaurant; pop. 24,280) on the N. and to (11 M.) *Navajas* and (39 M.) *Murga* on the S. 104 M. *Retamal;* 107 M. *Colón;* 119 M. *Macagua;* 128 M. *San Pedro*. Near (136 M.) *Alvarez* we enter the province of *Santa Clara*. 151 M. *Santo Domingo*, the junction for (21 M.) *Sagua la Grande* and (21 M.) *Las Cruces*. From (166 M.) *Esperanza* a line runs to the S.W. viâ Las Cruces to (36 M.) *Cienfuegos* (Union; Grand Continental; Brit. and Ger. Vice-Con.), a flourishing seaport (30,100 inhab.) in a rich sugar-growing district.

175 M. **Santa Clara** *(Santa Clara Hotel)*, a city of (1907) 16,702 inhab. (comp. p. 666). — 199 M. *Placetas del Sur;* 230 M. *Zaza del Medio*, the junction for (4 M.) *Sancti Spiritus* and (30 M.) *Las Tunas de Zaza*. At (235 M.) *Jatibonico* we reach the province of *Camaguey* (formerly *Puerto Príncipe*). 272 M. *Ciego de Avila* (Rail. Restaurant) is the junction of lines to *Morón* and (26 M.) *San Fernando* on the N. and to (18 M.) *Júcaro* on the S.

336 M. **Camaguey** (*Hotel Camaguey*, $3\frac{1}{2}$-5, well spoken of), one of the most flourishing cities in Cuba, with (1907) 29,616 inhab. and several interesting churches. Many attractive excursions may be made in the environs. Camaguey is connected by railway with (46 M.) the port of *Nuevitas* (p. 662). — 360 M. *Miraflores*. Between (390 M.) *Galbis* and (396 M.) *Bartle* we enter the province of *Oriente* (formerly *Santiago de Cuba*). 410 M. *Victoria de las Tunas* (Rail. Restaurant). Farther on we cross two branches of the *Salado River*, a tributary of the *Río Cauto*, the largest river on the island. 455 M. *Cacocum* is the junction for (11 M.) *Holguin* and (30 M.) *Gibara*, on the N. coast.

At (484 M.) *Alto de Cedro* the line forks, the left branch running towards the N.E. to the new and busy seaport of (31 M.) *Antilla*, while our route bends to the S. — 513 M. *San Luis*.

From San Luis to Guantánamo, 53 M., *Cuba Eastern Railroad* in 4 hrs. (fares $2.27, $1.52). — 14 M. *La Maya*. — 53 M. **Guantánamo** (*Washington, Venus*, R. from 75 c.; Brit. vice-consul, *Mr. Thos. Brooks*), a small but busy town with (1907) 14,559 inhabitants. — Beyond Guantánamo the railway runs on (17 M. farther) to *Caimanera*, on Guantánamo Bay, within 1 M. of which is a United States naval and coaling station.

From (522 M.) *Morón* a short line runs to La Maya (see above).

532 M. **Santiago de Cuba** *(Venus*, R. from $2\frac{1}{2}$; *Palace* or *Casa Grande*, R. from $1\frac{1}{2}$; U. S. Consul, *Mr. Ross E. Holaday;* Brit. Consul, *Mr. W. Mason)*, an important seaport, with (1907) 45,470 inhab., situated on a fine harbour with a narrow entrance guarded by the guns of *Morro Castle* (p. 668).

Santiago was founded in 1514 and was for several years the capital of Cuba. It was in attempting to escape from Santiago Harbour that Admiral Cervera's squadron was destroyed by the United States fleet on July 3rd, 1898; and Santiago itself surrendered on July 14th. These events were led up to by the landing of the United States troops at *Daiquiri*, 15 M. to the E. of Santiago, on June 20th, and by the battles of *San Juan* and *El Caney* (July 1st and 2nd; p. 668). Lieut. Hobson scuttled the 'Merrimac' in the entrance to the harbour on June 3rd.

The city stands on a steep slope rising from the harbour, is surrounded by mountains, and is noted for the brilliancy of its colouring. The focus of its life is the Plaza de Céspedes, adjoining which are the large *Cathedral* (1522), the *Municipal Offices*, the *San Carlos Club*, and other noteworthy buildings. Other points of interest are the *Slaughter House*, on the water-front, with a tablet commemorating the execution of the crew of the 'Virginius' in 1873; the monument of *Dr. Antommarchi*, Napoleon's physician at St. Helena (in the Cemetery); and the fine *School* built by Gen. Wood on the top of the hill. The drive to *Morro Castle* and back costs $ 3-4.

About 3 M. to the E. lies the battlefield of *San Juan* (p. 667; carriage ca. $ 2). The *Peace Tree*, under which Gen. Shafter received the surrender of Gen. Toral (July 17th, 1898), is denoted by inscriptions. — The battlefield of *El Caney* (p. 667) is 4 M. to the N.E. — About 9 M. to the W. is *El Cobre*, a copper-mining village, with the Church of Nuestra Señora de la Caridad, the most famous pilgrim-resort in Cuba. — A good military road leads to the top of the *Puerto de Boniato* (view).

Steamers ply regularly from Santiago to *Port Antonio* and *Port Royal* (Jamaica), *Havana*, *Cienfuegos* (p. 667), *Batabanó* (see below), *New York*, etc.

118. From Havana to Pinar del Río and Guane.

147 M. Western Railway of Havana in 6 1/3 hrs. (fares $ 7.11, $ 3.56); to (110 M.) *Pinar del Río* in 4 1/2 hrs. (fares $ 5.51, $ 2.76). Passengers for Guane change carriages at San Juan.

Havana (Cristina Station), see p. 663. The train runs towards the S., passing (9 1/2 M.) *Vento*, with the aqueduct carrying the water of the Almendares River to Havana (comp. p. 664), and (12 M.) *Santiago de las Vegas*, with a government experimental farm. — 14 M. *Rincón* is the junction of lines to (21 M.) *Guanajdy* (comp. p. 663) and viâ San Felipe (p. 666) to (21 M.) *Batabanó* (p. 666). Near (41 M.) *Las Cañas* we enter the province of *Pinar del Río*. The railway runs more or less parallel with the range of the *Organ Mts.* (p. 661), which rise a few miles to the N., and traverses one of the chief tobacco-growing districts of Cuba. 45 M. *Artemisa*, with its red-tiled houses, is surrounded by pineapple fields. Our line bends to the S.W. 64 M. *San Cristóbal*, a place of some importance (1456 inhab.). About 8 M. to the N. of (84 M.) *Paso Real* are the frequented mineral springs of *San Diego de los Baños* (Hotel Cabarrouy). 91 M. *Herradura* (hotel), an orange-growing settlement of Americans, with church, school, and town-hall; 96 M. *Consolación del Sur;* 100 M. *Puerta de Golpe*.

110 M. **Pinar del Río** (*Hotel Ricardo*, $ 3-4, well spoken of; *Globo*), a typical provincial capital with (1907) 10,634 inhab., is becoming of considerable importance as a centre of the tobacco trade. The roads in the vicinity are good, and afford many delightful drives.

120 M. *San Luis;* 125 M. *San Juan y Martinez;* 131 M. *Galafre;* 137 M. *Sábalo;* 146 M. *Mendoza*.

147 M. *Guane* (Hotel, $ 3), a thriving little town with a trade in tobacco.

Porto Rico.

Porto Rico or *Puerto Rico* ('Rich Port'), the easternmost of the Greater Antilles, lies within the Tropics, about 500 M. to the S.E. of Cuba and about 70 M. from the intervening island of Haiti or Santo Domingo. It is about 3500 sq. M. in area, with a length of 105 M. and a width of 25-40 M. It is traversed from E. to W. by a range of hills, culminating in the peak of *El Yunque* (3700 ft.) in the N.E. corner. In 1899 it contained 953,243 inhab., of whom 589,426 were white and 363,817 coloured. The island is very fertile, producing large quantities of sugar, tobacco, fruits, and coffee. The value of its exports in 1907 was nearly $ 27,000,000, that of its imports over $ 7,000,000. — Porto Rico was discovered by Columbus in 1493, conquered (mainly by Ponce de León, p. 616) in 1508-20, and ceded to the United States in 1898. It is administered by a Governor appointed by the President of the United States, who is aided by an Executive Council (also appointed by the President) and a popularly elected House of Delegates. It is represented at Washington by a Resident Commissioner.

Approaches. Porto Rico is reached direct from the United States by the steamers of the New York and Porto Rico Steamship Co., leaving New York at noon on Sat. (Pier 35, N. River) and reaching (1383 M.) *San Juan* in 4½-5 days (fares, first cabin $ 45-50, second cabin $ 30-35), or by the steamers of the same company leaving New Orleans once a month (6 days; 1690 M., same fares). In the intermediate weeks the steamers from New York run to *Ponce* or *Mayaguez* (5-6 days). The steamers of the *Red D Line* run fortnightly from New York (Pier 11, N. River) to San Juan and Ponce (same fares and times), while those of the *Insular Line* run to San Juan every other Sat. (fare $ 35-45; time same). — Porto Rico may also be conveniently reached by steamers from Havana, Jamaica, etc.

Railways and Roads. The chief cities, *San Juan* and *Ponce*, are connected by a railway running along the N., W., and S. sides of the island; but the service is still very inadequate. A famous *Military Road*, constructed by the Spaniards, runs diagonally across the island from San Juan to (84 M.) Ponce, and the other main roads (450 M. in all) are also good, offering many attractions for automobile excursions. Those who have a short time only at their disposal are advised to go by train from San Juan to Arecibo, drive thence to Ponce, and return by the Military Road (p. 671) to San Juan. This tour, which may be equally well made in the opposite direction, gives some idea of the beautiful mountain scenery of the interior

Climate. The climate resembles that of Cuba (p. 662). The extreme range of temperature is from 55° to 100° Fahr.; the mean annual temperature is about 80°, varying from 75° in Jan. to 82° in August. The annual rainfall averages 60 inches. The prevailing wind is from the N.E. The sanitation of the island has been greatly improved since its occupation by the United States; but the visitor should not drink the water unless it has been boiled

Bibliography. The only really valuable books on Porto Rico are in Spanish. English readers may consult the following works: *F. A. Ober*, Puerto Rico and its Resources (New York, 1899); *W. Dinwiddie*, Puerto Rico (London, 1899); *R. A. Van Mitteldyk*, The History of Porto Rico (1903). See also the Annual Reports of the Governor, the Census Report of 1899, and the Report of the Department of Commerce on 'Commercial Porto Rico in 1906'. Comp. also p. 662.

119. From San Juan Bautista to Ponce.

a. By Railway.

173 M. American Railroad of Porto Rico in 10-11 hrs. (fare $ 8.34).

San Juan Bautista de Puerto Rico (*Inglaterra*, $ 2½-4; *Colonial*, from $ 2½; *Las Palmas*, at Santurce, p. 670; Brit. and Ger. Con.), the capital of Porto Rico, founded in 1511, stands on a small island

connected by bridges with a peninsula of the N. coast. Population (1899) 32,048. The city is clean and regularly built, with spacious squares and narrow streets. Some of its chief streets are traversed by electric cars.

San Juan was founded in 1509, under the name of *Caparra*, on the S. shore of the bay, but was transferred to its present site in 1520. The first Bishop of San Juan was the first Inquisitor of the New World. Drake attacked the city without success in 1595, but it was captured by Lord George Cumberland two years later. In 1898 San Juan was bombarded by the U. S. fleet.

Near the centre of the city is the *Plaza Baldorioty* or chief square, where a band plays on Sun. and Wed. evenings (chair 10 c.). On the N. side of the Plaza is the *Town Hall*, on the W. are the *Government Offices ('La Fortaleza')*. A little to the N.W. are the *Cathedral* (with the tomb of Ponce de León, see below), the deserted *Convent of Las Monjas*, and the *Episcopal Church*. A little farther to the W., facing the entrance to the harbour, are the *Governor's Palace* and the **Casa Blanca* (16th cent.), or old house of the family of Ponce de León. To the S. of the Plaza, adjoining the wharfs and harbour, is the site of the new *Federal Building*, with the post office and custom-house. The scenes on the *Marina* are picturesque.

Proceeding to the E. from the Main Plaza, we reach the new *High School* and the *Plaza Colón*, in the centre of which is a *Monument to Columbus*. *Ponce de León* (ca. 1460-1521; p. 669), the founder of the city, is commemorated by a statue in the Plaza de San José, cast from cannon abandoned by the British in 1797. It stands opposite the church of *San José* (formerly the Dominican convent) The sacristy of the church of *San Francisco* contains some good works by Campeche, a notable Porto Rican painter of the 18th cent., many fine portraits by whom are preserved in private houses. Other important buildings are the *Military Hospital*, the *Presbyterian Hospital* (in Santurce), and the *Penitentiary*.

San Juan is a good specimen of a walled town, with moat and battlements. One gate only remains. The fortifications include the fortresses of *San Cristóbal* (1771; *View), on the E. side of the city, and the *Morro*, at the W. extremity of the island. — The *Harbour*, which had silted up, is being dredged and improved at great cost.

The picturesque suburb of *Cataño* is reached by ferry across the bay, and that of *Santurce* by railway or electric tramway.

From San Juan to Carolina, 14 M., railway in 1 hr. (fare 66 c). The line runs to the S.E. via *Santurce* (see above), *Martín Peña*, and (8 M.) *Río Piedras* (with a large normal school and the remains of the beautiful garden of the summer-palace of the Spanish governors). — *Carolina* a thriving little town with 5450 inhab., lies on the *Loiza*, 7 M. above its mouth.

From San Juan to Caguas, 22 M., railway in 1½ hr (fare 90 c.). From San Juan to (8 M.) *Río Piedras*, see above. The line here bends to the right and runs to the S., more or less parallel with the Military Road. — 22 M. *Caguas*, see p. 672.

The railway to Ponce diverges to the right from that to Carolina (see above) and runs towards the W. — 13 M. *Bayamón*, on the river of that name, which it is hoped to make navigable; 21 M. *Dorado*,

on the *Río de la Plata*, which the railway crosses. The line runs more or less parallel with the N. coast of the island, at a distance from it of 1-5 M. — 36 M. *Manatí;* 51 M. *Cambalache.* — 54 M. **Arecibo** (*Italiano*, $ 2; Brit. vice-consul), a seaport with 8000 inhab. and a considerable trade, lies at the mouth of the *Río Grande de Arecibo*. Near it is the interesting cave of *Consejo*. From Arecibo a road (*Views; comp. p. 669) runs across the island, viâ *Utuado* and *Adjuntas* (both with trade in coffee and tobacco), to (51 M.) Ponce (see below). — The railway now runs close to the sea. 61 M. *Hatillo;* 63 M. *Camuy;* 69 M. *Quebradillas;* 77 M. *Isabela* (Rail. Restaurant). A little farther on the train reaches the N.W. extremity of the island and bends to the S. (left.). — 80 M. **Aguadilla**, with two stations (*Puente* and *Playa*), is another flourishing seaport with 6500 inhabitants. A road runs inland from it to (13 M.) *San Sebastián* and (25 M.) *Lares*, once busy centres of the trade in coffee. A monumental cross near Aguadilla commemorates the landing of Columbus in 1493. We cross the *Río Culebrinas*. — 102 M. *Rincón*. Farther on we cross the *Añasco* or *Río Blanco*.

117 M. **Mayagüez** (*Hotel Paris*, from $ 2; Brit. and Ger. Vice-Con.), on the *Río Yagüez*, is the third city and seaport of the island, called at regularly by steamers from San Juan, Ponce, and New York. Pop. (1899) 15,187. There is a U.S. Agricultural Experimental Station here. Roads run inland to (16 M.) *Maricao* and (17 M.) *Las Marías*, two coffee-trading towns. — 123 M. *Hormigueros* is famous for its wonder-working shrine, which attracts numerous pilgrims. The church, picturesquely situated on the edge of a bluff, possesses two pictures by Campeche (p. 670). — (130 M.) *San Germán*, now a small and unimportant place, is historically the most interesting place in the island after San Juan and has a very old church (disused); Beyond San Germán the line turns to the E. (left). 151 M. *Yauco*. 158 M. *Guayanilla*.

173 M. **Ponce** (**Hôtel Francés*, $ 2½-3; *Inglaterra*, *Melia*, *Español*, $ 2-3; Brit. and Ger. Vice-Con.), the second city of Porto Rico, has (1899) 27,952 inhabitants. In the centre of the Plaza de las Delicias stands the *Church of Our Lady of Guadalupe*. The *Teatro de la Perla* is a handsome edifice. There are four *Protestant Churches*. *St. Luke's Hospital* is well equipped. Ponce is connected by electric tramway with its port at (2 M.) *Playa de Ponce*, whence steamers ply to many different points. In 1898 Ponce surrendered to the United States fleet without resistance.

The favourite excursion from Ponce is that to *Coamo Springs* (p. 672), a drive of 3 hrs. (by automobile 1-1½ hr.).

b. By Road.

84 M. Military Road (comp. p. 669). The whole distance may be accomplished by private carriage in 12-14 hrs. (fare ca. $ 16), or by automobile-stage in 5 hrs. (fare $ 8). The trip may be pleasantly broken by a night spent at *Coamo Springs* (p. 672).

San Juan, see p. 669. The **Military Road* reaches the mainland by a causeway and runs to the S. to (8 M.) *Río Piedras* (p. 670). It is admirably constructed throughout its whole length, and affords an excellent idea of the natural features of the island, traversing mountain, plain, and valley, and crossing numerous streams.

From Río Piedras the road runs for about 5 M. towards the S.W. and then turns to the S. (left). — 15 M. (from Río Piedras) *Caguas*, at the junction of a road from (25 M.) *Humacao* (near the E. coast; Brit. vice-consul), is a place with 5450 inhabitants (comp. p. 670). The road again bends to the S.W.

From *Cayey* (3760 inhab.), 16 M. from Caguas, a branch of the military road (traversing some of the best scenery in the island) leads to the left (S.E.) to (14 M.) *Guayama*, a place of 5334 inhabitants. The main road, which is at its finest between Cayey and Coamo, turns to the right and runs to the W. to (12 M.) *Aibonito*, situated nearly 3000 ft. above the sea and commanding beautiful views. Hence it runs to the S.W. to (12 M.) **Coamo** (*Hotel*, fair), where an unimportant engagement took place in 1898 between the Spaniards and the United States troops, preliminary to a battle which was averted by the signing of the peace protocol (Aug. 14th).

About 4 M. to the S., beautifully situated on the river of that name, are **Coamo Springs** (*Los Baños de Coamo; Hotel*, very fair), possessing some much-frequented hot sulphur springs, of great efficacy in cases of rheumatism.

Farther on we cross the *Río Descalabrado* and reach (13 M.) *Juana Diaz*. Between this point and (9 M.) *Ponce* (p. 671) we cross several streams.

BRITI
CO
Princess Royal Id
Laredo Ch
Banks Id
Aristazable Id
HECATE STRAIT
QUEEN CHARLOTTE Is
Kunghit Pt
C St James
Morseby Id
NOR
Wagoner Drobs Geog. Institute Leipzig

White Horse (Dawson)
BRITI
Princess Royal Id
Laredo Ch
Stephens Passage
ADMIRALTY
CHATHAM
STRAIT
Glacier Bay
CHICAGOFF
BARANO
Fairweather Mt
NORTH PACIFIC
ISLANDS
C St James

VIII. ALASKA.

Route	Page
120. From Seattle to Sitka	673
Vancouver Island 675. — Silver Bow and Treadwell Gold Mines 682.	
From Skagway to White Horse	683
Atlin District 683. — Nome. Fairbanks. Unalaska. Mt. Logan. Mt. St. Elias. Mt. McKinley 686.	

120. From Seattle to Sitka.

The tourist traffic to Alaska is largely in the hands of the *Pacific Coast Steamship Co.* of San Francisco, and a pamphlet with all necessary information, including stateroom-plans of the steamers, may be obtained from C. D. Dunann, 112 Market St., San Francisco, or from any agent of the company. The steamer 'Spokane' of this company (2000 tons burden) makes about six trips from Seattle to *Sitka* and back every summer (June-Aug.) taking about 11 days to the round journey (fare $ 100-250, according to position of berth and stateroom, the highest charge securing the sole occupancy of a large deck-stateroom). This steamer carries comparatively little freight and calls at Victoria, Ketchikan, Wrangell, Juneau, Treadwell's, Skagway, the Taku and Davidson Glaciers, Glacier Bay, Killisnoo, and Sitka. — The steamships 'Cottage City' and 'City of Seattle' of the same company sail fortnightly the year round, carry freight as well as passengers, take 12-14 days for the round trip from Seattle (fares $ 80-200), and call at more points in Alaska. Return-tickets are also issued from San Francisco (fare from $ 124) for passengers travelling by sea between that city and *Port Townsend* (p. 674). The fares from Tacoma, Port Townsend, or Victoria are the same as those from Seattle. Passengers should secure their berths in advance. — The steamers of the *Alaska Steamship Co.* also ply regularly between Seattle and *Skagway* and during the tourist season make occasional trips to the glaciers of *Taku Inlet* (p. 681). — Steamers of the *Canadian Pacific Railway Co.* (British Columbia Coast Service) ply regularly from Victoria and Vancouver to the various points along the British Columbia coast as far N. as *Port Simpson* (p. 677; fare $ 17-20) and also to (5 days) *Skagway* (p. 682), calling at *Ketchikan*. The through-fare to Dawson (p. 684) by this route is about $ 75 in summer, $ 150 in winter (meals and berths on the steamers included). The passengers by the Canadian steamers have not always the same privileges as the American steamers in landing at Alaska points. — Other excursion-steamers occasionally make the trip to Alaska in summer, but should not be patronized without careful investigation as to their equipment and the experience of their officers.

The arrangements of the Alaska trip resemble those on the trip to the North Cape, and it involves no greater hazard or fatigue. There are only a few hotels in Alaska, and passengers live almost entirely on the steamers. The weather is generally pleasant in June, July, or August. Warm winter clothing should be taken, as the nights on board are often very cold, though the sun may be quite powerful during the day. Stout boots are desirable for the short excursions on land, and waterproofs are indispensable. Deck-chairs may be bought or hired at the port of departure. Nearly the whole of the voyage is in the calm channel between the coast-islands and the mainland, so that sea-sickness need not be dreaded. The steamers are safe and reasonably comfortable. The *Scenery passed *en*

route is of a most grand and unique character, such as, probably, cannot be seen elsewhere at so little cost and with so little toil or adventure. In the description of the text the usual route of the 'Spokane' is followed. The approximate distances from Seattle by this course are given in nautical miles (7 naut. miles = about 8 statute miles). Native curiosities can, perhaps, be best obtained at Sitka (p. 685), furs at Juneau (p. 681). In buying the latter the traveller, if not an expert, should be on his guard against deception and should in no case buy except at the larger stores.

Alaska time is 1 hr. behind that of the Pacific standard (p. xiv).

Seattle, see p. 437. The first part of the voyage lies through ***Puget Sound**, named from a lieutenant on Vancouver's vessel, one of the most beautiful salt-water estuaries in the world, surrounded by finely wooded shores and lofty mountains. Its area is about 2000 sq. M., while its extremely irregular and ramified shore-line is nearly 1600 M. long. The usual width is 4-5 M. The depth varies from 300 to 800 ft., and at many points 'a ship's side would strike the shore before the keel would touch the ground'. There are numerous islands. A very large trade is carried on in Puget Sound in timber, coal, and grain. As we proceed *Mt. Rainier* or *Tacoma* (p. 446) is conspicuous to the S.E., while the *Olympic Mts.* (p. 437) are seen to the W.

Comp. 'Vancouver's Discovery of Puget Sound', by *E. S. Meany* (1907).

As the steamer continues to plough its way towards the N., we obtain a view of **Mt. Baker** (10,800 ft.), the last outlier of the Cascade Mts., far ahead of us (right). The steamer bends to the left into *Admiralty Inlet*, the main entrance to Puget Sound. To the right lies *Whidbey Island*.

40 M. **Port Townsend** (*Central*, *Delmonico*, R. from $ 1; Brit. and Ger. Vice-Con.), a picturesque little town of 3443 inhab., lies partly on the shore and partly on a steep bluff behind, reached by long flights of steps. It lies at the head of the *Strait of Juan de Fuca* and is the port of entry for Puget Sound. The large grey-stone building on the bluff is the *Custom House*. To the left lies *Fort Townsend*, with a large marine hospital.

Our boat now steers to the N.W. across the Strait of Juan de Fuca. To the left are the Olympic Mts., ahead lies Vancouver Island; to the right, in the distance, rises Mt. Baker. As we approach Victoria, the little city presents a very picturesque appearance. The conspicuous building on the height to the right is the house of the late *Mr. Dunsmuir*, a wealthy coal-owner. To the left of the pier, among trees, are the barracks of *Esquimalt* (p. 675).

75 M. **Victoria** (*Canadian Pacific Hotel*, from $ 3½; *Dallas*, $ 3-5; *Driard*, $ 2½-5, R. from $ 1¾; *Victoria*, $ 2-4, R. from $ 1; *Dominion*, $ 1½-2½, R. from 50 c.; *Poodle Dog Restaurant*, D. 75 c.; U. S. Consul, *Mr. A. E. Smith;* cab per drive, 1-2 pers., 50 c.), the capital of British Columbia, is a quaint and quiet little city with about 25,000 inhab., forming a strong contrast to the bustling cities we have just been visiting on the American shores of the Sound. Victoria, like these, is of recent origin, having been founded as a

station of the Hudson Bay Co. in 1842 and not beginning to develop into a town until the gold-mining excitement of 1858. The population includes a strong contingent of Chinamen. The centre of the town (1½ M.) is reached from the wharf by tramway (5c.). The Parliament Buildings, forming a tasteful group in a square adjoining James Bay, include the *Parliament House*, the *Provincial Museum & Library*, and the *Government Offices*. The monument in front commemorates *Sir James Douglas*, first governor of the colony. **Beacon Hill Park* should also be visited. The streets are wide and clean, and most of the private residences stand in gardens rich in shrubs and flowers. The roads in the vicinity of Victoria are unusually good and afford charming drives through luxuriant woods of pine, maples, alders, arbutus, madronas, fern-trees, and syringas.

About 3 M. to the W. of Victoria (tramway, 10 c.) lies Esquimalt, with a good harbour. Down to 1905 Esquimalt was the headquarters of the British Pacific Squadron, but in that year it was handed over to the Dominion Government, while the *Navy Yard* was dismantled. The large dry-dock (430 ft. long) has, however, been retained.

From Victoria to *Nanaimo*, see below. — Steamers ply regularly from Victoria to *Vancouver* (see *Baedeker's Canada*).

Vancouver Island, at the S. extremity of which Victoria lies, is 290 M. long and 50-80 M. wide, with an area of 20,000 sq. M. The greater part of its surface is covered with mountains, reaching a height of 6-7000 ft. (Victoria Peak, 7485 ft.), and but little has been reclaimed or settled by Europeans since its exploration by Vancouver in 1793. The two native tribes are the *Nootkas* and *Selish*, a few of whom may be met in Victoria.

From Victoria our course lies to the N., through the *Canal de Haro*, which was decided by the arbitration of the King of Prussia in 1872 to be the line of demarcation between American and British possessions. To the left lies Vancouver Island, to the right the *San Juan Islands*, beyond which the cone of Mt. Baker is long visible. Looking backward, we see the Olympic Mts., on the other side of the Juan de Fuca Strait. On issuing from the archipelago of Haro Strait, we enter the broader waters of the Gulf of Georgia (20-30 M. wide). Various islands lie off the shore of Vancouver.

105 M. **Nanaimo** *(Windsor, Wilson Ho.*, $ 2-2½; *U. S. Consular Agent)*, a small town on the E. coast of Vancouver, with 6100 inhab., is of importance as the outlet of the extensive collieries of the Western Fuel Co. (the headquarters of which are in California) and of the Dunsmuir mines at Ladysmith and Comox (see p. 674). There are also large saw-mills. The Alaska steamers often stop to coal here either in going or returning. The pretty, rose-gardened cottages of Nanaimo are very unlike the grimy abodes of coal-miners in England, and many of the miners own them in freehold. The annual output of coal at Nanaimo is about 500,000 tons, and nearly twice as much is produced at the Wellington pits, the total output of the island being about 1,500,000 tons. Nanaimo is connected with (5 M.) *Wellington* and (73 M.) *Victoria* by the only railway on the island. — *Vancouver* (see *Baedeker's Canada*) lies on the mainland, directly opposite Nanaimo (steamer, $ 3).

Farther on we see few settlements or signs of life. The shores are low and heavily wooded, but lofty mountains rise behind them on both sides, those on the mainland covered with snow. Long, deep, and narrow fjords, flanked with lofty mountains, run up into the land. To the right lie *Lesqueti Island* and the large *Texada Island*, covering the entrance to *Jervis Inlet*, one of the just-mentioned fjords, on the banks of which are quarries of fine slate. *Comox* (left) on Vancouver Island, opposite Texada and 60 M. to the N. of Nanaimo, is an important coal-mining station, with regular steamer-connections with Victoria, Vancouver, and Nanaimo. About 80 M. beyond Nanaimo we leave the Gulf of Georgia and enter ***Discovery Passage,** a river-like channel, 25 M. long and 1-2 M. wide, which separates Vancouver Island from *Valdes Island* and is flanked by mountains 3-6000 ft. high. Valdes Island, ending on the S. in *Cape Mudge*, occupies nearly the whole channel, and a scheme has been in consideration for running a railway from the mainland to Vancouver Island by bridges constructed over the narrow waterways here. Behind Valdes Island opens the narrow **Bute Inlet*, 40 M. long, flanked by mountains 4-8000 ft. in height. About the middle of Discovery Passage are the famous **Seymour Narrows*, 2 M. long and $^1/_2$ M. wide, through which the water rushes with great velocity (sometimes 12 knots an hour). The U. S. steamship 'Saranac' was wrecked in these Narrows in 1875, and their navigation still demands great skill and caution.

Discovery Passage is succeeded by ***Johnstone Strait,** another similar channel, 55 M. long and 1-3 M. wide, between Vancouver Island on the left and the mainland itself, or islands hardly distinguishable from it, on the right. The *Prince of Wales Range*, on Vancouver Island, reaches a height of about 4600 ft.; and the white summits of the *Cascade Range* rise to the right beyond the lower intervening hills. The varied beauty of the scenery cannot easily be indicated in words; but few travellers will weary of the panorama unfolded as the steamer advances. — Beyond Johnstone Strait we thread *Broughton Strait* (15 M. long), between Vancouver and *Cormorant* and *Malcolm Islands*. On Cormorant Island lies the Indian village of *Alert Bay*, with a salmon-cannery, a totem-pole, and a native graveyard. The conical summit to the left is *Mt. Holdsworth* (3040 ft.).

On emerging from Broughton Strait we enter **Queen Charlotte's Sound,** which is 10-30 M. wide and contains many islands, mostly adjoining the mainland. On the shore of Vancouver lies *Fort Rupert*, an old post of the Hudson Bay Co., with an Indian village. A little later we pass through *Goletas Channel* and then say farewell to Vancouver Island, the N. point of which, *Cape Commerell*, we leave to the left. For a short time (40 M.) we are now exposed to the swell of the Pacific Ocean, but this is seldom enough in summer to cause uneasiness even to bad sailors. To the N.W., in the distance, loom

the large *Queen Charlotte Islands*, the chief home of the *Haidas*, the cleverest of the native-tribes of this coast (comp. p. 679). A full account of the islands is given by *Dr. George M. Dawson* in the Report of the Canadian Geological Survey for 1879.

Our course now hugs the mainland and leads at first through **Fitzhugh Sound*, a deep and narrow channel, the W. shore of which is formed by a continuous series of islands. The sharp peak of *Mt. Buxton* (3430 ft.) rises on *Calvert Island*. As we near the N. end of the Sound the scenery becomes very grand, huge snowy peaks towering above the pine-clad hills that line the channel. Beyond the large *Hunter's Island* we turn sharply to the left and enter the extremely narrow and winding **Lama Passage*, between it and *Denny Island*. On *Campbell Island*, to the left, is the Indian village of *Bella Bella*, opposite which is a graveyard, with totem-poles (comp. p. 679). Farther on we pass through the wider *Seaforth Channel* and reach *Millbank Sound*, the only other point on the voyage where we are exposed for a brief interval to the waves of the open sea. Beyond this sound we enter *Finlayson Channel*, 24 M. long and 2 M. wide, between the large *Princess Royal Island* (48 M. long and 25 M. wide) and the mainland. Numerous fjords, short and long, run into the mainland, and several high waterfalls descend from the cliffs. Finlayson Channel is continued by *Tolmie Channel*, *Graham Reach*, and *Frazer Reach*, beyond which we pass through *McKay Reach*, between the N. end of Princess Royal Island and *Gribbell's Island*, into *Wright's Sound*. Behind Gribbell's Island is the **Gardner Canal*, one of the grandest and gloomiest fjords on this coast. From Wright's Sound we enter **Grenville Channel**, which runs for 50 M. in an almost perfectly straight line between *Pitt Island* and the mainland. It is flanked on both sides by steep mountains 1500-3500 ft. high, while still higher mountains rise in the background to the right. At places the channel is only a few hundred feet wide. Signs of glacier action are seen on the more distant mountains, while the courses of long bye-gone avalanches may be traced by the light-green streaks of the younger growth of trees. Crossing an expansion of Grenville Channel, we next enter the short *Arthur Passage*, between *Porcher Island* (l.) and *Kennedy Island* (r.), which leads to *Malacca Passage* and the wide **Chatham Sound**. To the right near, the mouth of the *Skeena River*, lies *Port Essington*. Along the Skeena are scattered innumerable salmon-canneries. The E. side of the Sound is bounded by the large *Chim-sy-an* or *Tsimpsean Peninsula*, which is connected with the mainland by a very narrow neck of land. On this lie *Prince Rupert*, the terminus of the new Grand Trunk Pacific Railway, and *Old Metlakatla*, the scene of Mr. Wm. Duncan's interesting experiences in educating the natives (see p. 680) and now a missionary station of the Episcopal Church of Canada. Higher up is *Port Simpson*, a station of the Hudson Bay Co., established in 1831. On the small island, opposite the Fort, is an interesting village of Tsimpsean

Indians, who have attained a high measure of civilization and prosperity. The *Nasse River*, a little to the N. of the Tsimpsaen Peninsula, is the chief scene (in spring) of the catch of the ‚oulichan' or candle-fish *(Thaleichthys Pacificus)*, which furnishes the natives with the means of artificial light. It is so full of oil that, when dry and furnished with a wick, it burns like a candle. To the left lie the *Dundas Islands*, opposite the northernmost of which opens *Portland Inlet*. Just here we cross the boundary-line between the British and American possessions (54° 40′ N. lat.; the famous 'fifty-four forty or fight' of 1843) and enter Alaska †. To the left opens *Dixon Entrance*, between *Graham Island* (S.) and *Prince of Wales Island* (N.). Between Dixon Entrance and Skagway we pass five lighthouses.

The territory of Alaska received its name from Charles Sumner in a speech addressed to the Senate in favor of the purchase of the territory. It is a corruption of an Aleut word referring to the continent as distinguished from the Aleutian islands. The boundaries of the territory comprise the continent and islands adjacent, to the W. of 141° W. long, and also a strip to the W. of a line drawn parallel to the coast from the vicinity of Mt. St. Elias (p. 686) in a S.E. direction to the N. extreme of Portland Canal, through the canal in mid-channel, and westward to the ocean on the parallel of 54° 40′ N. lat. The W. limits of the territory, to the N. of the Pacific Ocean, include the Aleutian chain, the islands of Bering Sea, and the eastern of the two Diomede Islands in Bering Strait.

The territory is divisible by its physical characteristics into several diverse regions. The *Sitkan Region*, including the coast and islands to Cook's Inlet on the N. and the Kadiak group on the W., has a rough and mountainous topography with many glaciers. a bold sea-coast, numerous fjords and islands, a moist, cool, and equable climate, and a dense covering of chiefly coniferous forests. — The *Aleutian Region* includes the peninsula of Alaska, the Aleutian chain, and the Pribiloff or Fur Seal Islands. It also has a cool and equable climate, with much fog and wind but less rain than in the Sitkan region. It consists of broad level areas with numerous clusters of mountains, few glaciers, many volcanic cones, many harbours and anchorages; and, while totally destitute of trees, nourishes luxuriant crops of grass, herbage, and wild flowers. The Aleutian chain represents an old line of fracture in the earth's crust; and, contrary to the usual idea, a large proportion of the islands are not volcanic but composed of crystalline or sedimentary rocks. — The *Yukon Region* includes the mass of the continent to the N. of the great peninsula, which has on its N. border true Arctic conditions, on its W. shores a mild summer and an Arctic winter, and in the interior a hot short summer and a dry cold winter, much like that of Minnesota. It is a region of *Tundra:* low, undulating ranges of grassy mountains, and extensive, level, more or less wooded river-valleys.

The products of the Sitkan region are timber, precious metals, salmon, halibut, and other sea-fish. Petroleum, copper ores, lignitic coal, and extensive beds of marble exist in many places. The Aleutian region produces chiefly fox and sea-otter fur, the fur-seal pelts, and a certain amount of coal. Extensive cod-fisheries are prosecuted along its shores. The Yukon region produces gold, furs, and salmon. A remarkable characteristic of the Territory is that, though bordering on the Arctic Ocean and in the S.

† The exact boundary between Alaska and Canada was not definitely settled till Oct., 1903, when it was determined by a Commission, meeting in London and composed of delegates from the United States, Great Britain, and Canada. Iron pillars are being erected to mark the frontier. Comp. Map, p. 673.

teeming with glaciers, it has still never been subjected to the action of a continental ice sheet, such as have ground down the coasts of the analogous fjord-regions of New England and Norway.

The native inhabitants of Alaska belong to four ethnologic stock races: the *Eskimo* or *Innuit*, with their special offshoot the *Aleutian* people; the *Haida Indians* of Alaska; the *Tlinkit* stock of the Sitkan region; and the *Tinneh* or *Athabascan Indians* of the great interior region. In all there are between twenty and thirty thousand of these natives, independent, self-sustaining, and mostly well disposed. They are in no direct way related to any of the present Asiatic races as is so often assumed, but, from the evidences of the prehistoric shell-heaps, have occupied the region for many centuries. They live by fishing and hunting; the moose, the caribou, and the salmon in the interior, and the hair-seal, the beluga, the cod and other sea-fishes, the salmon, and wild fowl, on the coasts, furnish their chief supplies. The fjords and rivers are their roads; with hardly an exception they are canoe-men everywhere, and throughout the N. drivers of dogs and sledges.†

Among the Tlinkit and Haida people one custom is forced on the attention of all who visit their villages. It is that of erecting what are called *Totem Poles*, which have various significations, the most common being that of a 'genealogical tree'. A man erects one of their large communal houses, and, in memory of this achievement, puts up in front of it a cedar pole carved with figures emblematic of the totems of himself and his ancestors, one above another. The door of the house is frequently cut through the base of the pole under the totem of the builder; while, above, the successive totems (which by their social laws must change with every generation) appear in the order of remoteness.

The estimated area of the territory is 586,400 sq. M. (thrice that of France); its total population about 70,000, of which one-third may be accounted civilized; its chief archipelago, in the Sitkan region, is said to contain 5000 islands; its total shore line amounts to some 18,200 M.; its principal commercial port is in about the same latitude as Liverpool; its southernmost islands lie on the parallel of Brussels; its westernmost village is as far W. from the mouth of the Columbia River, Oregon, as Eastport, Maine, is E. from that point; it includes within its boundaries the highest mountains, the most superb glaciers and volcanoes in America to the N. of Mexico; and presents the anomaly of a territory with only about one inhabitant to 8 sq. M. which in 20 years paid more than eight million dollars in taxes. It was transferred by Russia to the United States in 1867 for the sum of $ 7,250,000.

To the above paragraphs, which were kindly drawn up for this Handbook by *Dr. Wm. H. Dall*, it may be added that since 1867 Alaska has exported furs, fish, and gold to a total value of at least $ 280,000,000; that it has absorbed merchandise from the United States during the same period to the value of $ 150,000,000; and that the investments of American capital in the territory amount to at least $ 50,000,000. — The first election for a delegate to Congress was held in 1906.

The fullest account of Alaska is contained in the record of the 'Harriman Alaska Expedition' (1899), a work in five huge volumes, written by the various members of the Expedition and profusely illustrated (1903-4). A more manageable and also authoritative work is 'Alaska and its Resources' by *Dr. Wm. H. Dall.* A good popular account is given in *Miss E. R. Scidmore's* 'Alaska and the Sitkan Archipelago'. See also *A. P. Swineford's* 'Alaska: its History, Climate, and Natural Resources', *John S. Maclain's* 'Alaska and the Klondike' (1905), and *Ella Higginson's* 'Alaska, the Great Country' (1908). Comp. 'The Geography and Geology of Alaska', by *Alfred H. Brooks*, and other publications of the U. S. Geological Survey.

To the right, as we proceed, juts out *Cape Fox*, formerly the site of *Fort Tongas.* The steamer next enters the *Revillagigedo*

† Reindeer have recently been introduced into N. Alaska, where they thrive well and have been of great service to the native population.

Channel, with *Duke Island* and *Annette Island* to the left. The latter, the largest of the Gravina group (E.), is the seat of *Port Chester*, with the new *Metlakatla*, founded by Mr. Duncan on leaving his original station (see p. 677). To the right, opposite (to the N. of) Annette Island, lies the large island of *Revillagigedo*, the chief place on which is **Ketchikan** *(Steadman Hotel)*, a town of about 1000 inhab., an important mining and fishing centre, the port of entry for S.E. Alaska and stopped at by all steamers. It has a salmon-cannery and a large fish-packing establishment. There are two interesting totem-poles here, and a beautiful walk may be taken up the creek at the back of the town. On *Pennock Island*, opposite Ketchikan, is an Indian graveyard with totems. On emerging from the narrow channel separating the island of *Gravina* (left) from Revillagigedo we enter **Clarence Strait**, which is 100 M. long and 4-12 M. wide and is bounded on the W. by *Prince of Wales Island* (130 M. long and 30 M. wide), the seat of considerable copper, and of a little gold mining. This is one of the seats of the *Haidas* (comp. p. 677) and the steamers sometimes call at *Old Kasan*, on the E. shore, to allow tourists to see its wonderful totem-poles (75-100 in number). We are now within what is known as the *Alexander Archipelago*, about 1100 of the islands of which appear on the U.S. charts. The mountains on each side of the strait are fine in size, proportions, and colouring. Near the head of Clarence Strait we steer to the right (E.), between *Etolin Island* (r.) and *Zarembo Island* (l.), and run into *Wrangell*.

765 M. (from Seattle) **Wrangell**, situated on the N. end of the island of the same name (so called from Baron Wrangell, Russian Governor of Alaska in 1834), opposite the mouth of the *Stikine River*, was rebuilt after a fire in 1906 and now contains about 300 white inhabitants and 250 Tlinkits (p. 679). It was originally founded by the Russians in 1834 as a fortified post to prevent the Hudson Bay Co. from ascending the Stikine River for the purpose of fur-trading, and is still of some importance for its saw-mills and trade in furs. It was the scene of many conflicts with the natives, who attacked it in 1840 and 1869. Wrangell was formerly much visited by tourists on account of its totem-poles (p. 679), but many of the best of these have been destroyed by fire.

The Tlinkits will interest the visitors, who will at once notice such customs as the blackening of the faces of the girls (said to have for its object the preservation of the complexion) and the wearing of *labret's*, or small plugs of silver, ivory, wood, or bone, in the lower lip. Curiosities of various kinds, including labrets, silver bracelets, carved horn and wooden spoons, reed baskets, halibut hooks, gaily painted canoe-paddles, the carved rattles of the Shamans, and fine carvings in slate may be purchased from the natives; and the inquisitive may visit the imperfectly ventilated interior of one of the huts.

The Stikine River is said to receive 300 glaciers, and its scenery is very fine. It was for a time used as one of the routes to the gold mines of the **Klondike Region** (see *Baedeker's Canada*).

Soon after leaving Wrangell we thread our way through the devious **Wrangell Narrows*, where the channel is marked by stakes

and buoys. The shores here are well-wooded, and at places stretches of grass border the water like the lawns of an English country-house. *Petersburg*, on the W. shore, has one of the largest fish-canneries in Alaska and is called at by many of the steamers. Farther on, in *Soukhoi Channel*, the scenery is of a more majestic character. The mountains on either side, though apparently of no very great height, are covered with snow to within 1000 ft., or less, of the water; and their shapes are very varied and beautiful. One of the most striking is the *Devil's Thumb* (9062 ft.), a peaked monolith recalling the Dolomites of Tyrol. We here see the first glaciers of the voyage (all to the right): the *Le Conte Glacier*, high up on the mountain-side; the larger *Patterson Glacier;* and the *Baird Glacier*, in *Thomas Bay*. About this part of the trip, too, we may meet our first piece of floating ice; while the effects of the late sunsets (9-10 p.m.) are indescribably beautiful. The huge slopes of *névé*, or hardened snow, are fine.

Soukhoi Channel widens into *Frederick Sound*, with *Cape Fanshawe* to the right and *Kupreanoff Island* to the left; but our course soon leaves this sound and carries us to the N. through the long *Stephens Passage*, bounded on the W. by the large *Admiralty Island*. *Holkham* or *Sum Dum Bay*, to the right, has been the scene of some placer-mining. Near the head of the passage, to the right, opens *Taku Inlet, with its fine glaciers, one of which has a sea-face $^1/_2$ M. long and 100-200 ft. high. The steamer now usually enters this inlet to afford a close view of this glacier as a substitute for the Muir Glacier (see p. 684). The muddy grey water of the inlet is filled with ice-floes and bergs. The surrounding mountains are of a fantastic, Dolomitic appearance. The chief settlement of Admiralty Island is *Killisnoo*, on its W. coast, with large oil-works. — Just beyond the mouth of the Taku Inlet we enter the pretty *Gastineau Channel*, between *Douglas Island* and the mainland.

965 M. **Juneau** *(Occidental; Circle City; Juneau)*, now the capital of Alaska (comp. p. 685), is situated on the mainland, on a narrow strip of comparatively level ground between the sea and a precipitous, snow-seamed mountain (3300 ft.). Settled in 1880 and named after a nephew of the founder of Milwaukee (p. 383), it is occupied mainly by miners. It now contains ca. 2000 inhab., nearly 90 per cent of whom are white. Juneau contains a theatre, several churches, a woollen mill and other industrial establishments, and some shops for the sale of Alaskan furs (sea-otter, seal, otter, beaver, bear, musk-rat, fox, etc.; see, however, p. 674) and the famous *Chilkat Blankets*. The last are made of the hair of mountain-goats and coloured with native dyes, but genuine examples, worth $60-100, are now rare, and most of those offered for sale are made of wool and stained with aniline dyes.

About $^1/_2$ M. to the N. of Juneau is a village of the *Auk Indians*, a curious and primitive, but very dirty settlement, which will repay a visit.

The traveller may bargain here for a trip in an Indian canoe. Behind the village is a native *Cemetery*, with curious little huts containing the cremated remains and personal effects of the deceased.

A well-made road leads from Juneau through the highly picturesque **Canyon of the Gold Creek*, with its waterfalls and small glacier, to (3½ M.) Silver Bow Mines, and offers a trip well worth making if time allows. The Silver Bow Basin contains gold mines of great promise, and both quartz and placer mining are successfully prosecuted.

A fine view of the Gastineau Channel is afforded by *Mt. Juneau* (3590 ft.), which rises just to the N. of the town and is ascended by a trail leaving the Gold Creek road 1 M. from Juneau.

On Douglas Island, nearly opposite Juneau, is the famous *Treadwell Gold Mine, at which the steamers generally call. The mine, which is close to the wharf and easily visited, has one of the largest quartz-crushing mills in the world, employing 880 stamps. The quartz does not produce more than $1-5 of metal per ton, but is so easily and economically worked that the profits are said to be enormous. The gold actually in sight is estimated to be worth 4-5 times as much as the price paid for the entire district of Alaska (p. 679). Many of the best workers in the mine are natives, who earn $3 per day. Many others are Slavs.

As the upper end of Gastineau Channel is very shallow, the steamer now returns to its S. end and then proceeds to the N. through *Saginaw Channel*, on the W. side of Douglas Island. This debouches on the ***Lynn Canal**, a fine fjord extending for 60 M. towards the N. It is flanked with snow-mountains, rising abruptly from the very edge of the water to a height of 6000 ft., and presents, perhaps, the grandest scenic features we have yet encountered. To the left, on the peninsula between Lynn Canal and Pyramid Harbor (p. 683), lies *Fort William H. Seward*, the largest army post in Alaska.

About a score of glaciers, large and small, descend from the ravines into the fjord, among which the *Auk*, *Eagle* (r.), and *Davidson Glaciers* are conspicuous. The last-mentioned, near the head of the fjord and on its W. side, spreads out to a width of 3 M. as it reaches the water-level, its front being partly masked by a tree-grown moraine. Passengers are generally landed here for a closer inspection of the glacier.

Lynn Canal ends in two prongs, named the **Chilkoot** and **Chilkat Inlets**, recently come into prominence in connection with the rush to the gold district of the Klondike. In these inlets the tourist reaches the highest latitude of the trip (59° 10′ 37″ N.; about that of the Orkney Islands, Christiania, and St. Petersburg). At midsummer there are not more than 3-4 hrs. of partial darkness here.

The *Chilkoot Pass* (3100 ft.), 28 M. from tide-water, with a very abrupt seaward slope, was crossed in 1897-8 by 25,000 people and thousands of tons of freight.

On the E. bank of Chilkoot Inlet (the E. arm) lies **Skagway** (*Fifth Avenue*, *Golden North*, from $ 2½), a little town with about 1100 inhab., the terminus of the White Pass Railway (see p. 683), now forming practically the only route used in approaching the Klondike and Yukon districts from the coast. It is furnished with hotels, outfitting-establishments, and other accommodations for the miner. The steamer stops here long enough to allow of an excursion to the head of the pass. Good paths lead from Skagway

to *Mt. Dewey*, *Denver Glacier*, and various picturesque waterfalls and lakes. — *Dyea*, on the W. bank, was formerly a rival of Skagway but has been deserted since the opening of the railway. — On Chilkat Inlet lie *Pyramid Harbor* and *Chilkat*, with prosperous salmon-canneries. There are also other settlements on the inlet. This is the district in which the fine Chilkat blankets (p. 681) are made. Good echoes may be wakened off the glaciers.

From Skagway to White Horse, 111 M., *Pacific and Arctic Railway* (*White Pass and Yukon Route;* narrow-gauge) in 7 hrs. (fare $ 20; return-fare to White Pass $ 5; through-fare to Dawson from Seattle, Vancouver, or Victoria ca. $ 80 during season of navigation). Travellers are strongly recommended to make at least the trip to the summit of the pass and back, as the mountain, cliff, and canyon scenery is very striking, while the construction of the line itself is also interesting. — The line runs through a level wooded country to (4½ M.) *Boulder*, at the foot of the pass, and then begins to ascend rapidly. Farther on the railway has been blasted out of an almost perpendicular wall of living rock, and at (8½ M.) *Clifton* the cliffs actually overhang the track. Below, to the right, we see the rushing *Skagway River* and the old trail to the Klondike. Opposite rise the *Saw-Tooth Mts.* At (14 M.) *Glacier* the train is within ½ M. of the great glacier of the Coast Range. We thread a tunnel and cross a canyon by a steel cantilever-bridge 215 ft. high. 19 M. *Switchback.*

20½ M. **White Pass** (2885 ft.), grandly situated at the head of the pass and commanding a superb view. It lies on the Canadian frontier and contains both the American and Canadian custom-houses, while the 'Union Jack' and the 'Stars and Stripes' float side by side at the station. Small luggage is examined here, and the search for smuggled gold-dust is a great annoyance to the tourist. The waters of *Summit Lake* flow to the Pacific Ocean through the Skagway River and to Bering's Sea viâ the Yukon.

We now descend along the *Thompson River*. 32 M. *Log Cabin* was formerly the Canadian customs-station. — 40½ M. *Bennett* (2185 ft.; luncheon-station) lies at the S. end of **Lake Bennett**, a narrow mountain-bound sheet of water 27 M. long, the E. bank of which the railway skirts. As we approach (67 M.) *Caribou*, at the N. end of Lake Bennett, we cross its outlet, flowing into *Nares* or *Tagish Lake*.

Caribou is the starting-point for a visit to the gold-producing *Atlin District*. A steamer (through-fare to Atlin $ 10) plies viâ Tagish Lake and *Windy Arm* to the *Taku Arm*, at the foot of *Jubilee Mountain* (ca. 9800 ft.). Stops are made at (59 M.) *Golden Gate* and (74 M.) *Taku City*. A small railway takes us hence along the *Atlintoo River* to (3 M.) *Scotia Bay*, in **Lake Atlin**, on which another steamer plies to (5 M.) *Atlin* (Grand Hotel, from $ 3), on the E. bank of the lake.

The train now follows the *Watson River* to *Lewis Lake*, the level of which was lowered during the construction of the railway. Several

other small lakes are passed. 75 M. *Lansdowne;* 88½ M. *Robinson.* At (104½ M.) *Wigan* a short halt is made to allow a view of **Miles Canyon* (to the right), a ravine ⅝ M. long, in which the water drops 32 ft., while the current runs at the rate of 15 M. per hour. This canyon and * *White Horse Rapids* (⅜ M. long), just below it, were frequently dared on raft and scow by the gold-seekers in the early rush to the Klondike.

111 M. **White Horse** (2078 ft.; *White Pass*, *Commercial*, from $3), on *Fifty Mile* or *Lewes River*, the present terminus of the railway and the centre of a productive copper-mining district, has become a place of some importance with about 1000 inhabitants. It is in about the same latitude as St. Petersburg.

From White Horse to (ca. 460 M.) *Dawson* (9000 inhab.), the capital of the Yukon Territory, see *Baedeker's Canada.*

From Skagway (p. 682) the steamer returns to the S. end of Lynn Canal and then bends to the right (N.W.) into *Icy Strait.* Opening off this to the right is **Glacier Bay,** which extends to the N.W. for about 45 M., with a width contracting from 12 M. to 3 M. The mountains immediately abutting on the bay are comparatively low (4000-7000 ft.), but as we ascend it we enjoy a magnificent **View to the left of the **Fairweather Range,** including (named from left to right) *Mt. La Pérouse* (10,740 ft.), *Mt. Crillon* (15,900 ft.), *Mt. Lituya* (11,832 ft.), and *Mt. Fairweather* (15,290 ft.). At the head of the bay is **Muir Glacier,** the visit to which was, prior to 1899, the grandest single feature of the Alaskan expedition. An earthquake in that year, however, changed the conditions so entirely, by disrupting the glacier and filling the bay with ice, that the steamer cannot now get very near the glacier, which has also lost much of its scenic impressiveness.

This stupendous glacier is formed by nine main streams of ice uniting to form the trunk of the glacier, which occupies a vast amphitheatre, 30-40 M. across. The width of the glacier when it breaks through the mountains (*Pyramid Peak* to the W., *Mt. Wright* and *Mt. Case* to the E.) to descend to the sea is about 3 M. The superficial area of the glacier is 350 sq. M., or about the same as that of Huntingdonshire or of the Jostedalsbræ in Norway. Dr. John Muir was the first to visit the glacier (1879). Prof. G. F. Wright, who explored the glacier in 1886, estimated its rate of movement at 70 ft. per day in the centre and 10 ft. at the sides (an average of 40 ft.), as compared with 1½-3 ft. at the Mer de Glace, but Prof. H. F. Reid, of Johns Hopkins University (p. 207), who spent the summers of 1890 and 1892 here, found the most rapid movement not more than 7 ft. per day. Though the glacier thus moved forward at a comparatively rapid rate, investigation showed that it lost more ice in summer than it gained in winter and that its front was retrograding steadily from year to year. It is evident from the general appearance of the enclosing hills that the ice-stream once occupied the whole of Glacier Bay; and numerous features of the moraines and adjacent rocks give proof of more recent retrocession. Vancouver found the bay blocked by a wall of ice in 1794. In 1906 Messrs. F. E. and C. W. Wright of the U. S. Geol. Survey found that Muir Glacier had retreated so far (6 M.) since 1899, that it has been split into two distinct glaciers by a ridge of rock exposed by the melting of the ice.

The nearest way from Glacier Bay to Sitka would be through *Cross Sound* and down the W. side of *Chichagoff Island*, but to avoid the unpleasantness of an outside passage the steamer usually returns through Icy Strait (p. 684) and Chatham Sound (p. 677). About one-third of the way down the latter we diverge to the right through **Hooniah* or *Peril Sound*, between the islands of *Chichagoff* (N.) and *Baranoff* (S.). This strait is wide at first but ultimately contracts to a width of $^1/_2$M., where its wooded hills and islets recall the scenery of Loch Lomond. As we approach Sitka we have a fine view, to the right, of *Mt. Edgecumbe* (see below), with its crater half filled with snow.

1395 M. **Sitka** (*Millmore's Hotel*, $2), down to 1906 the capital of Alaska and seat of the governor, is very beautifully situated on the W. side of Baranoff Island, with a fine bay dotted with green islands in front and a grand range of snow-mountains behind. The bay is sheltered by *Kruzoff Island*, with the extinct volcano *Mt. Edgecumbe* (2880 ft.), while immediately to the E. of the town towers *Mt. Verstovaia* (3210 ft.). Sitka now contains ca. 1200 inhab., two-thirds of whom are natives. The town was founded in 1804 by Alex. Baranoff, the first Russian governor of Alaska (see *W. Irving's* 'Astoria'), after the destruction by the natives (1802) of the original Russian settlement in the island (1799), 6 M. to the N. Sitka lies in 57° N. lat. (about the same as that of Aberdeen or Riga) and, owing to the *Kuro Siwo*, or Japanese current, has a milder winter than Boston, in spite of the propinquity of eternal snow (mean summer temp. 54°, winter 32°). The temperature seldom falls to zero. The rainfall is high (ca. 90 inches).

On a height to the right of the dock (fine view) stand the ruins of **Baranoff Castle**, the residence of the Russian governors, burned down in 1894. — Near the head of the main street, leading from the wharf into the town, is the **Russo-Greek Church**, with its green roof and bulbous spire, which contains some interesting paintings and vestments (small fee charged for admission). Many of the natives and half-breeds are members of the Greek church, and Sitka is the seat of the Orthodox Greek bishop of the United States. Several of the substantial old *Log Houses* of the Russians are still in use. — Turning to the right at the head of the main street and following the road along the beach, we reach the buildings of the **Presbyterian Mission**, where visitors are welcome. The ***Sitka Museum**, a highly interesting collection of Alaskan products, is installed in a building in the mission-grounds, fitted up like the dwelling of a native chief, with a totem-pole at the entrance. — By passing up between these buildings we reach the ***Indian River Walk** (a round of about 2 M.), where the visitor with preconceived ideas of Sitka's arctic climate will be surprised to find luxuriant vegetation, fine trees, and a brawling brook-not unlike such typical English walks as the Torrent Walk at Dolgelley. One of the characteristic plants is the 'Devil's Club' (*Echinopanax horrida*).

The **Native Village**, or *Rancherie*, lies to the left of the wharf and is occupied by 800-1000 Sitkans, including many interesting specimens such as 'Mrs. Tom' and 'Sitka Jack', who are always at home to steamboat visitors. Tourists occasionally get up canoe races among the natives, and exhibitions of native dancing are often arranged for their benefit. Behind the village is the native and Russian cemetery.

Native curiosities may be bought at Sitka comparatively cheap, and a Russian samovar may still occasionally be picked up here. Travellers should also visit the office of the *Alaskan* (10 c.), a weekly paper.

Sitka is the turning-point of our voyage, and we now retrace the way we have come (viâ Icy Strait, Chatham Sound, Frederick Sound, etc.). The distance to Seattle is about 1200 M., taking 5-6 days. As a rule few stops are made on the homeward journey; but much fine scenery, previously passed at night, is now seen by daylight. Passengers for the *Canadian Pacific Railway* leave the steamer at Victoria and proceed thence by a smaller steamer to *Vancouver* (see *Baedeker's Handbook to Canada*).

Steamers now run regularly from Seattle (9 days) and other ports to Nome (*Hotels*), on the *Seward Peninsula*, in the N.W. part of Alaska. This is the headquarters of a district in which large quantities of gold have been discovered since 1898 and contains about 5000 inhabitants. It communicates by small steamers with *St. Michael's*, a U. S. military post on *Norton Sound*, 110 M. to the S.E., whence river-steamers ascend the *Yukon* to (1600 M.) *Dawson* (see p. 684 and *Baedeker's Canada*). — Other steamers ply to *Cordova*, on *Prince William Sound*, whence a railway is being constructed to the copper-mines of the *Copper River Region*. The Cordova steamers go on to *Valdez*, at the head of Prince William Sound, and to *Seward* (500 inhab.), in *Resurrection Bay*, on the S. side of the *Kenai Peninsula* (4 days from Seattle). From Seward a railway ('Alaska Central Railway') is in contemplation to (ca. 500 M.) Fairbanks, the largest gold camp in the interior (ca. $ 8,000,000 yearly), which disputes with Nome (see above) the position of the most populous place in Alaska (ca. 5000 inhab.).

A steamer of the *Alaska Steamship Co.* runs monthly, while navigation is open, from Seward to *Unalaska*. The sea is generally smooth in summer. Some of the steamers from Seattle to Nome (see above) also call at Unalaska (5 days).

Mt. Logan (19,539 ft.), for a time believed to be the highest mountain in N. America, is situated in Canada, just beyond the Alaskan frontier, to the N. of 60° N. lat. and about 45 M. from the coast. A little to the S.W. of it is **Mt. St. Elias** (18,024 ft.), first ascended by Prince Luigi of Savoy in 1897, with the *Malespina Glacier* on its seaward side. These mountains are nearly 300 M. to the W. N. W. of Glacier Bay (p. 684) and are not visible on any part of the trip above described. — **Mt. McKinley** (20,300 ft.), the real monarch of N. American mountains, rises in Alaska, about 300 M. to the W. of the international boundary and about 130 M. to the N. of Cook Inlet, in ca. 63° N. latitude. It stands at the watershed of the Yukon (see above), the *Kuskokwim*, and the *Susitna* (*Sushitna*), the three greatest rivers of Alaska, and presents on every side a succession of granite cliffs and overhanging glaciers. The largest of the latter are the *Fidèle* and *Ruth Glaciers*, on the E. slope, and the *Hanna Glacier*, on the W. On the W. Mt. McKinley rises abruptly out of a plateau (2500 ft.), abounding in caribou, but on the E. it is screened by a belt of mountains 8000 ft. in height. From the S.E. it appears like 'a great bee-hive, weighted down with all the snow it can possibly carry'. Mt. McKinley was ascended in 1906 by *Dr. Fred. A. Cook*, accompanied by *Edward Barrille*. The ascent took eight days (Sept. 9-16th). See account published by Dr. Cook under the title of 'The Top of the Continent' (New York and London, 1908).

EAST BOSTON

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